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COASTAL BARRIER IMPROVEMENT ACT OF 1989

HEARING

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

AND THE

SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES

OF THE

COMMITTEE ON MERCHANT MARINE AND FISHERIES HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

FIRST SESSION

ON

H.R. 2840

A BILL TO PROVIDE FOR EXPANSION AND IMPROVEMENT OF THE COASTAL BARRIER RESOURCES SYSTEM

AUGUST 2, 1989

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CONTENTS

	Page
Hearing held August 2, 1989	1
Text of H.R. 2840	36
Statement of:	
Davis, Hon. Robert W., a U.S. Representative from Michigan	3
DeLay, Hon. Tom, a U.S. Representative from Texas	45
Fascell, Hon. Dante B., a U.S. Representative from Florida	5
Prepared statement	10
Gribin, Ira, president, National Association of Realtors (prepared statement)	90
Hair, Jay D., president, National Wildlife Federation	14
Prepared statement	47
Hertel, Hon. Dennis M., a U.S. Representative from Michigan, and Chairman, Subcommittee on Oceanography and the Great Lakes	2
Hughes, Hon. William J., a U.S. Representative from New Jersey	4
Prepared statement	4
Jannereth, Martin, chief, Shoreland Protection Unit, Michigan Department of Natural Resources	23
Prepared statement	84
Keating, David, executive vice president, National Taxpayers Union	16
Prepared statement	69
Ortiz, Hon. Solomon P., a U.S. Representative from Texas	5
Sheets, Dr. Robert C., director, National Hurricane Center, Department of Commerce	18
Prepared statement	72
Studds, Hon. Gerry E., a U.S. Representative from Massachusetts, and Chairman, Subcommittee on Fisheries and Wildlife Conservation and the Environment	1
Young, Hon. Don, a U.S. Representative from Alaska	3
Communications submitted:	
Grady, Porchie F., (Playa del Rio, Inc.): Letter of 17 August 1989, to Hon. Gerry E. Studds	109
Mauro, Garry, (Texas Land Commissioner): Letter of 18 September 1989, to Hon. Gerry E. Studds	114

THE COASTAL BARRIER IMPROVEMENT ACT OF 1989

WEDNESDAY, AUGUST 2, 1989

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, AND SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES, COMMITTEE ON MERCHANT MARINE AND FISHERIES,
Washington, DC.

The Committee met, pursuant to notice, at 10:41 a.m., in Room 1334, Longworth House Office Building, Hon. Gerry E. Studds (chairman of the subcommittee) presiding.

Members present: Representatives Studds, Hughes, Hertel, Dyson, Ortiz, Carper, Pallone, Davis, Saxton, and Herger.

Staff present: Subcommittee on Fisheries and Wildlife Conservation and the Environment—William Woodward, staff director; Jeff Pike, professional staff; Joyce Sacco, clerk; Lisa Murray, research assistant; Rodney H. Moore, Jr., minority professional staff; Thomas O. Melius, minority professional staff. Committee on Merchant Marine and Fisheries—Don Barry, counsel for fisheries and wildlife; Lori Williams, counsel; Sue Waldron, press secretary. Subcommittee on Oceanography and the Great Lakes—Brian O'Malley, counsel; Bill Ashworth, professional staff/clerk; Lawrence G. Flick, minority professional staff; and Lisa Pittman, minority counsel.

OPENING STATEMENT OF HON. GERRY E. STUDDS, A U.S. REPRESENTATIVE FROM MASSACHUSETTS, AND CHAIRMAN, SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

Mr. STUDDS. The Subcommittees will come to order.

We meet this morning to discuss H.R. 2840, legislation to expand and improve the Coastal Barrier Resources System.

That System has been a success. Over the last seven years, it has saved Federal taxpayers almost $1 billion, preserved the environmental health of some of the most beautiful areas of our country, and—almost certainly—saved many human lives.

Coastal barriers need and deserve special protection. They create and maintain the wetlands and estuaries that nourish commercial and recreational fisheries; they provide habitat for migratory waterfowl; and they offer boundless opportunities for recreation. They are also extremely vulnerable to erosion and floods. For these reasons, coastal barriers are risky places to live, expensive places to insure, and the wrong places to build.

Although the Coastal Barrier Resources Act does not prohibit or regulate development in coastal barriers, it does require that those who wish to develop previously undeveloped barriers do so at their own risk and expense, not that of the Federal taxpayer.

I introduced H.R. 2840 because I believe the System is fair; it is working well; and it should be expanded. The bill would almost double the size of the System. It would for the first time include acreage along the Great Lakes, and it directs the Interior Department to consider areas for inclusion along the Pacific Coast.

I understand the concerns that many may have about the proposed inclusion of particular areas within the System. Such concerns are inevitable, but I believe they are also resolvable. The Interior Department maps that serve as the basis for the bill may contain technical errors, and they surely include some areas that ought not to be included and exclude others that should be.

For this reason, we will not act on this bill until all those who have legitimate questions, complaints, and suggestions have had a chance to be heard. I encourage local officials and private citizens who have concerns to work through their congressional offices, and I pledge, in turn, to make our staff available to any Member of the House who is concerned about the effects that this legislation may have on his or her District.

Last March, we heard directly from the Department of the Interior concerning their recommendations for expanding the System. Department officials will be available today to respond to questions and provide technical help, and we will hear testimony from the public and from one who represents a part of that public with a very special interest in this legislation, our colleague from Florida, who in a moment will be our first witness.

Let me turn first, if I may, to the distinguished Chairman of the Subcommittee on Oceanography and the Great Lakes, my colleague from Michigan, Mr. Hertel.

OPENING STATEMENT OF HON. DENNIS M. HERTEL, A U.S. REPRESENTATIVE FROM MICHIGAN, AND CHAIRMAN, SUBCOMMITTEE ON OCEANOGRAPHY AND THE GREAT LAKES

Mr. HERTEL. Well, thank you very much.

I don't have an opening statement at this time. There are a lot of questions that have been raised, but I'm supportive of the legislation overall. And we'll have to look at specifics which is part of the process of this hearing.

I am glad to welcome Chairman Fascell and await his testimony this morning.

Mr. STUDDS. The gentleman from Michigan.

Mr. DAVIS. Thank you, Mr. Chairman.

I appreciate the opportunity to be here. I am not an official Member, as you are aware, of this Subcommittee. Before I give my opening statement, I would like to have entered into the record Congressman Don Young's statement.

Mr. STUDDS. Without objection.

[The statement of Mr. Young follows:]

STATEMENT OF HON. DON. YOUNG, A U.S. REPRESENTATIVE FROM ALASKA

Mr. Chairman, I join with you in welcoming the witnesses to the second hearing our Subcommittee will be conducting on the Coastal Barrier system.

As you recall, I supported the original Coastal Barrier Act because of its positive effect on Federal spending. While I think that there are some particular areas that deserve careful attention, I generally support H.R. 2840 as well. However, there are some points in the bill that will merit further discussion.

First, the change in definition that will include the Florida Keys in the system needs to be looked at very closely. I am not convinced that the Keys should be included. Further, if they are, I think we have to look at the definition change to make sure that we are not accidentally affecting other areas of the country.

Second, I have considerable concerns with the possible inclusion of areas on the Pacific Coast in the system. As you know, Alaska is already blessed—or cursed, depending on your point of view—with a large number of protective Federal land holdings, including the Alaska Maritime Wildlife Refuge, which includes every large rock on the coast of Alaska. I am not sure we need the Coastal Barrier System as well.

Third, your bill does not exempt "otherwise protected areas" as recommended by the Secretary of Interior. I think this issue needs to be explored more fully.

Mr. Chairman, I know that there is a lot to do before we come up with a bill that solves all the problems. I look forward to working with you on the final bill.

OPENING STATEMENT OF HON. ROBERT W. DAVIS, A U.S. REPRESENTATIVE FROM MICHIGAN

Mr. DAVIS. Mr. Chairman, the Coastal Barrier Resources System is an extremely controversial idea. I recommend that we proceed with caution.

We must look carefully at each of the units the Department of the Interior has recommended to ensure that the area meets the criteria of the Coastal Barrier Resources Act and that its inclusion will promote the life, property, and Federal money saving purposes of the Act. Inclusion in the System can have devastating impacts on a local community's economy, especially where the only hope of a better life is through minor Federal assistance and not large, private development.

I know for certain that several of the units in the Department's Great Lakes inventory have been improperly identified. The Department has promised to correct these, but I am disappointed in the job the Department did in the Great Lakes. Aerial photography was not used in many cases, outdated USGS maps formed the basis of many decisions, local communities were not contacted, and few site visits were taken.

Finally, I am also frustrated that the Department included units with public highways in Michigan in its recommendations. This was a specific exemption in the Great Lakes Coastal Barrier Act requested by the State to allow it to complete passing lanes for public safety along a few coastal roads. My reading is that this exemption will still apply if these units are included in the Coastal Barrier System, but I would welcome some legislation clarification.

I plan to work with you, Mr. Chairman, to ensure that if the Coastal Barrier System is extended to the Great Lakes, that it will be done fairly and accurately.

I appreciate your opening remarks indicating that you are going to cooperate with the Members in the various communities and States that do have problems with it. Hopefully, we'll be able to resolve these problems and have a bill which can be accepted. I want to make sure that we do proceed with caution.

Thank you, Mr. Chairman.

Mr. STUDDS. I thank the gentleman.

The gentleman from New Jersey.

OPENING STATEMENT OF HON. WILLIAM J. HUGHES, A U.S. REPRESENTATIVE FROM NEW JERSEY

Mr. HUGHES. Thank you, Mr. Chairman.

Mr. Chairman, I want to first of all thank you for convening the hearing. I have a statement which I would ask unanimous consent that it be permitted in the record in full.

I would just like to say that I strongly support the legislative intent of the Coastal Barrier Resources Act. I was a strong supporter when it passed in the early part of the 1980's. I remain a firm supporter of it today. I have a number of questions about some of the proposed units to be included in the Act. Some of the areas are already protected in my District. I question the wisdom. In other areas, I am concerned about some of the boundaries as they have been drawn, but I am reassured in knowing that the Chairman is going to move cautiously and work with the Members in trying to develop the very best piece of legislation, one that is rational and that will carry out the intent of the law.

I thank the Chairman.

[The statement of Mr. Hughes follows:]

PREPARED STATEMENT OF HON. WILLIAM J. HUGHES, A U.S. REPRESENTATIVE FROM NEW JERSEY

Thank you Chairman Studds and Chairman Hertel for holding today's hearing on H.R. 2840, legislation amending the Coastal Barrier Resources Act to include changes recommended by the Department of the Interior.

In the last few days the news media have followed Hurricane Chantel's path towards Texas and Louisiana—reminding us of the imminent threat the sea holds over homes along the coast. Luckily, the hurricane was downgraded to a tropical storm resulting in little damage to the coastal communities.

A single storm has the potential to drastically alter barrier islands and result in extensive damages to homes along the coast. Recognizing the need to minimize risks from developing in such high-hazard areas, the Congress enacted the Coastal Barrier Resources Act.

This Act discourages development of barrier islands by prohibiting Federal assistance, such as Federal flood insurance and other revenues that promote economic growth within the Coastal Barrier Resources System.

While I approve of protecting undeveloped barrier islands, I also advocate protecting coastal communities on barrier islands where development has already taken place. Almost the entire east coast of my district, which is made up of a chain of barrier islands, is developed, supporting a number of residential communities and resort areas.

However, H.R. 2840 has incorporated a number of units in my district that have been endorsed by the Interior Department to be included in the system. I am concerned about some of the areas that have been recommended.

One such unit would include the Great Egg Harbor Inlet. This inlet is part of the Intracoastal Waterway and is an extremely important navigation channel for commercial fishermen and recreational boaters. In 1986, Congress, in cooperation with the State of New Jersey, authorized the construction of a multi-purpose navigation and beach erosion control project along the inlet.

Just last month the House of Representatives approved $250,000 to begin construction of this badly needed project in fiscal year 1990. The project authorization includes, if necessary, the construction of stabilization structures. It is my hope that this inlet would be maintained by periodic maintenance and beach renourishment. However, we cannot forever preclude the possibility that stabilization structures might be one day necessary.

In addition, the associated shoreline included in the proposed unit is developed. It exceeds the density threshold of one structure per five acres that the coastal barrier

task force used to categorize barrier islands as developed. There are some other units proposed for inclusion that raise some questions that need to be addressed.

Mr. Chairman, I want to once again express my strong support of the legislative intent of the Coastal Barrier Resources Act—to protect undeveloped barrier islands and their fragile natural resources. Thank you.

Mr. STUDDS. I thank the gentleman.

The gentleman from Texas.

OPENING STATEMENT OF HON. SOLOMON P. ORTIZ, A U.S. REPRESENTATIVE FROM TEXAS

Mr. ORTIZ. Thank you, Mr. Chairman. I would also like to thank you for giving us an opportunity to hold these hearings today.

This is a very important issue to all the coastal areas in the Gulf of Mexico and along the Atlantic Ocean, and particularly to my Congressional District and the State of Texas. The Coastal Barrier Improvement Act of 1989 proposes to add 790,000 acres and 423 miles of shoreline to the System, as well as to make a number of boundary modifications. I do support the intent of preserving our natural resources and protecting our wetlands. However, I am very concerned because of how this is going to affect our economy and our growth in our community. But you have been more than fair, and your staff has given us the opportunity to present our case to you and your staff, and I appreciate that.

Thank you, Mr. Chairman.

Mr. STUDDS. I thank the gentleman.

Mr. STUDDS. If there are no other opening statements, we will go to our first and extraordinarily distinguished witness, the gentleman from the southernmost part of Florida, our distinguished colleague, Mr. Fascell. I understand, Dante, you have some of your more distinguished constituents with you. If you would, introduce them and proceed as you wish.

STATEMENT OF HON. DANTE B. FASCELL, A U.S. REPRESENTATIVE FROM FLORIDA

Mr. FASCELL. I thank you very much, both Chairmen and Members of the two subcommittees, for giving us the opportunity to appear here. I do have some distinguished visitors with me appearing here today, Mr. Chairman.

On my left is Larry Plummer, who is a State senator from Monroe County, the affected county in Florida. He has been in the legislature 11 years. He is on one of the committees that oversees the State plan which we'll talk about here, in which the County of Monroe is involved.

On my right is the Mayor Pro Tem, Eugene Lytton, of Monroe County, who is now serving his third year. We are pleased to be here, gentlemen.

I have a prepared statement which I have submitted, and with your permission, I'd just like to include it in the record and then proceed extemporaneously, if I can.

Mr. STUDDS. We know you can. I will say your statement will appear in full.

Mr. FASCELL. Let me say that we in Monroe County at the southern tip of Florida share some of the concerns that have already been expressed in the opening statements, Mr. Chairman. As a sup-

porter of the Coastal Barrier Act, originally, and as a strong conservationist, I still believe that there's a lot of work to be done in this country if we're to have any natural environment at all. How to balance those concerns with the needs of people is always a difficult problem. It involves decisions that must be made on a day-to-day basis.

In our area, we're an exception because we're in God's country, literally and figuratively. The pressures are tremendous there because of people who love the area and are of concern not only to the people there because they want to make a living, but also because they want to protect what it was that brought them there in the first place. It's not always an easy decision.

This county, which comprises the southern tip of Florida, is different also in the sense that these are islands are not islands which do not protect the mainland. So it requires a real change in the definition of the Act which is now pending before this Subcommittee to include these islands, both from the standpoint of the standard definition, as well as from the scientific definition. Because we're not talking here about fluctuating sand islands as barriers or the geological definition that was written into the original Act. We're talking about cemented carbonate. We'll probably give you an example, if we haven't already, of what it looks like. But it's rock. These islands are rock.

The other thing that you have to visualize is the fact that these islands extend 130 some miles from the end of Florida, and there's no land on either side. The only thing they're protecting is themselves. Now, I suppose you could by extension say that, well, on the lee side—or whatever side is the lee side depending on the way the wind's blowing that day—they offer some protection in a normal wetlands sense. We have mangroves and we have shallows, and we know that all of those are important for our fishing industry, both commercial and sporting. We know that there is a real value in protecting the wetlands and the mangrove shorelines and we have been busily trying to do that while at the same time dealing with the problem of reasonable development.

Now, you know, for a long time, the Keys just sat there, and then all of a sudden they were discovered by man. In the pure, pristine days when I first went there, one of the things that the environmental study was trying to protect was the beauty of the place. They called them shacks, but I don't. It was habitation in a native sense. You didn't see what normally came about in terms of condos and CBS buildings. In those days, the only protection the natives were concerned about or needed to be concerned about was from hurricanes. We're not in a flood plain; we're below the flood plain which makes us a unique problem. We're not looking at a 50-year cycle that the engineers use, or the 100-year cycle like in a river bottom that says you're going to get flooded out every year and the Government is going to have all kinds of insurance claims.

The tidal flow does not, except for the normal kind of thing that affects the shoreline, it is not the kind of thing that washes away the whole island or the whole coastline. We're not involved in that. The last claim that was paid down there was—when was it, Mayor? 1972?

Mr. LYTTON. Before FEMA.

Mr. FASCELL. Yes, 1972. So here I am over in another committee of the Congress with an the amendment to the FEMA Act trying to say, hey, wait a minute, you guys, we've been complying all these years. We've been meeting the criteria for construction, and now you're going to punish us by increasing the premiums if we don't meet some additional hard criteria that was never contemplated.

I am fighting over here on one side to do that, and over here on the other side, which says basically that the Federal Government is not going to do anything to help develop lands which we think are critical in terms of the habitat for fish and wildlife and the geological environment.

It is not the first time we've been put in the paradoxical position and I know that. We're going to work out something with FEMA so that people in Monroe County are not unduly penalized in trying to comply with the Federal act which was put into effect prior to the Coastal Barrier Act. We put that act into effect because, and rightly so, at the Federal level we were concerned as Congressmen with the constant payment and the damages in troubled areas when they had a disaster. We were making the payments and people would go right back in the same area and build over again. Finally, we decided we'd better try to get some control over that and see if we couldn't change that process. So we made flood insurance available, and Monroe County jumped into the act to make the necessary changes to do whatever it could.

Right now, just to give you an idea, we're talking about meeting construction codes imposed at the Federal level in order to be eligible for flood insurance so you could go on and do your normal living. One of the issues that we're raising is whether or not you have to elevate a house up above a certain level in order to meet their criteria, which is fine if you have the money and you like that kind of house; it is not too good if you don't.

In the old days, the conchs—the name for the local residents who live there—built solid concrete houses, and they put steel cables over the top and anchored them into the concrete pillars in the coral rock. And I guarantee you, no storm blew them away. The conchs had sense enough that they could smell the storm, so they moved out, opened the doors and let the water flow through. When the storm was over, they'd move back in. Those days, of course, are gone forever but there are enough people down there that still remember those days.

We are talking now about a county with 640,000 acres remaining, of which 109,000 would be affected under this bill. The county gave 800,000 acres to the Everglades National Park, so they're not lax in their desire to preserve the habitat. I might add that I hope some of you can come down there and see this because it is different. Besides that, you'll love it.

We have two national parks in that area. We have six refuges. We have one national monument. One of the national parks was an area that I had a long, hard struggle with in the Interior Committee in order to make it a national park. There is a series of 33 islands off of the shores of Miami—the Biscayne National Park—which might have fit the definition of a barrier island as conceived in the original legislation. These islands had very few dwellings, if

any, on them—two or three at the most—so we incorporated them into the national park and preserved those islands.

But the Keys are different. At one time we had a railroad running all the way from Miami down to Key West. When the storm of '26 came along—1926, that is; I'm not that old as the other one—but in 1926, the railroad was gone, and we went ahead then with the constant improvement of the roadway. Now, U.S. 1 runs all the way down to Key West and there is a series of 33 bridges that connects it with the mainland of Florida. Over which, and under which, you've got the water pipeline that serves all these people. As you know, developments have proceeded since that time.

Now, in the struggle to preserve the beauty of these 109,000 plus acres that make up the Keys, we've had the usual difficulties, so much so that the State of Florida—and Larry Plummer here is on one of the committees that oversees this—declared Monroe County an area of "critical concern." We have a merging of State and county interests in an effort to do what is proper by way of development, to have the standards, to have meaningful development that's proper, which protects the environmental interests of the county, the State, and the Nation. This has not been an easy struggle. The people in Monroe County are still fighting to resolve the problems that exist with respect to the State and local government trying to mesh gears here to do this balancing act between environmental protection and development.

Now comes the Federal Government. What good will it do is the first question that has to be asked here, if you change the definition under the existing law so that you reach out and geologically take in these islands which do not really fit the category? The purpose of it is to, quote, "save the Government money." We know that is the real purpose is and there's nothing wrong with saving money, all right, if it really did that for the Federal Government. Under the FEMA Act, we're going to continue to comply, and we're going to continue to get flood insurance.

Now, you say, well, we're going to take that away from you under this Act and that will stop development. Well, I daresay it will not. If you go down there and look, you will know it's not going to stop development. All it's going to do is unfairly discriminate in the effort to do what is right, and that is to protect the environment, make it available to as many people as possible, and to save ourselves in the element because if mankind doesn't stop destroying the environment, there will be no place for man either. We'll literally bury curselves in garbage.

But in the desire to do that, will we really do it? I submit to you respectfully we will not accomplish what it is that these subcommittees are basically trying to do. Now, why is that? Because this land is extremely valuable, it's beautiful, and you have got 67 miles of shoreline. I am reliably advised by my expert real estate people who are sitting right behind me that that shoreline goes for about 150,000 bucks an acre, 67 miles of it. The interior land, the upland, goes for anywhere from ten to twenty thousand an acre. We're talking a lot of money here and a lot of desire. Every red-blooded American has always wanted to own his own island and if he can't own it, he's going to have a piece of it.

The people who cannot afford to go out and get conventional financing are the people who get out because the flood insurance and other Federal amenities and subsidies will not be available. You freeze them out. The guy who worked all his life and got himself an acre of ground and wants to go down to Monroe County and live like a king won't be able to do that. But the guy that's got the money already will do it, and it won't make any difference what kind of restrictions you put in the barrier bill. You might go some place else and stop him, but you won't do it with this bill.

It doesn't solve the problem and changing the definition is a kind of a tortured way to get at these islands. It would be a lot better if we went back to the old Phil Burton concept when the idea for the bill was first being kicked around, and that is to buy the land and take the money out of the Land and Water Conservation Fund and say these lands are necessary for protection in the public interest at the national level; the county and State can't afford to do it, but the Federal Government will help.

Well, you know the answer to that, and I know the answer to that. We haven't even been able to catch up with the in-holdings since the National Park System was created. We have literally worried ourselves to death about the fact that we designate, we mark, we draw boundaries, but we don't acquire. I've been here 35 years, and we are still billions of dollars behind our authorizations, but we're doing our best, obviously, to save the environment and to save those things that are important. That's the only thing we can do because we can't get sufficient funds to make the acquisitions to really preserve our society.

And so, I'm saying to you, therefore, that a special exception with regard to the barrier program needs to be made in this case with regard to Monroe County: first because it doesn't fit the normal definition that was envisioned at the time that we passed the Coastal Barrier Act; secondly, and most importantly, is it will not really accomplish what it is that we're trying to do. I know that our bottom interest is to try to preserve the environment and protect the wildlife and the fauna of this area.

As I say, the county has made a remarkable contribution to Federal efforts. The Federal Government has made real contributions as has the State of Florida. The only marine park, the John Pennycamp Park, is a State park. We have two National Marine Sanctuaries. We are now in the process—I've got an amendment before one of these committees now, and with the help of the committee we will take the last of the living reefs in the United States and hopefully include them in a marine sanctuary. We have a whole group of State parks in this small segment of land left to these 70,000 people.

You know we're not going to run people off the island so, now the question is, can we stop everybody else from coming in? Not with this Act. I believe what we have to do is keep working with the State and the county in order to evolve a satisfactory system to achieve the needed kind of balance, unless the Federal Government is prepared to step in and say, look, we're going to fence off this land. I would hope that we had had the vision a long time ago to do what we're trying to do now, and I would hope that this would be effective.

I would just respectfully submit it will not do it and that it will just complicate matters for a lot of people, and I'm saying let us work that problem out because the State and the county have been doing their best to do it—not that we can't use Federal help. We can.

Thank you very much.

[The statement of Mr. Fascell follows:]

PREPARED STATEMENT OF HON. DANTE B. FASCELL, A U.S. REPRESENTATIVE FROM FLORIDA

Mr. Chairman, and Members of the Subcommittees, I appreciate the opportunity to appear here today to discuss the recommendations made by the Department of the Interior (DOI) for inclusion in the Coastal Barrier Resource System (CBRS) as they relate to the 19th Congressional District of Florida. First, let me say that I recognize what a unique program this is in the sense that it sets aside endangered coastal barrier islands and, in the process, saves the Federal Government money. This is why I supported the Coastal Barrier Resource Act. However, I have long opposed the Department's efforts to include all of the Florida Keys in the CBRS, and I continue to strongly oppose this attempt because I find it to be neither constructive nor fair.

The Coastal Barriers Study Group correctly stated the significance of the many natural resources of the Florida Keys. The protection of this environment has long been the subject of my concern and will continue to be one of my foremost priorities. However, I strongly disagree with the DOI's attempt to change the existing definition of a coastal barrier to include land formations composed of carbonate-cemented and mangrove shorelines, such as the Florida Keys. The aquatic habitats surrounding the Keys, which, as you know, consist of an extensive system of rock formations, sandbars and living coral reefs, are unique to the United States and should not be included in a system originally designed to protect other types of ecosystems. Those of you who have been to the Florida Keys know this and I am hopeful that those of you who have not been as fortunate thus far will be able to travel there soon for field hearings.

I oppose DOI's recommendation to amend the definition of a coastal barrier island in such a way that would qualify the Florida Keys for inclusion in the CBRS. If you change the geological definition in a manner that would qualify the Keys, they still do not fit, in my opinion; they only loosely meet the other definitions. The Keys are subject to minimal wind, wave and tidal erosion because the natural system of offshore reefs and sandbars severely decreases the wave and tidal energies that the Keys—carbonate-cemented rock formations—are subject to. Further, the calm, prevailing tropical winds known to the region do no measurable or significant damage to the solid rock islands.

Another qualifying definition is an island which "protects associated aquatic habitats and consequently the fish and wildlife in those associated aquatic habitats." Protecting these types of habitats has long been a priority of mine, but, if DOI were truly committed to such preservation, why has it proposed to drill for oil off the coast of the Keys? Clearly, such drilling poses a far more significant threat to fish and wildlife populations than any other DOI proposal before this Congress. I have trouble understanding why one arm of the Department wants to preserve these sensitive environments, and another wants to endanger them.

As any map clearly indicates, the Keys do not directly break the wind, wave or tidal forces on the mainland's coast. What makes the Keys unique, both physically and culturally, is that they are their own entity south of the mainland and connected to it by a series of bridges. The argument that the Florida Keys, from Key Largo to Key West, act as a barrier island to South Florida is like saying the Aleutian Islands act as a coastal barrier island for the Alaskan coast.

Simply put, I do not believe that any part of the Florida Keys belongs in the Coastal Barrier Resource System. More than an effort to conserve or preserve sensitive lands, I view this as a disguised attempt by DOI to begin withdrawing the Federal Government's commitment to the thousands of residents of the Keys to provide flood insurance and other crucial Federal support activities. Had this definition of a barrier island been included in the original legislation, this measure would have essentially been a land-use referendum for the Florida Keys, and I would have vigorously opposed the measure.

In a responsible effort to control development in the Keys, Monroe County and the State of Florida, in 1986, adopted a comprehensive land-use plan designed to es-

tablish the rate of further growth in environmentally sensitive areas. While DOI states that there is nothing "which allows an area to be excluded from the CBRS because of [land-use] planning," I firmly believe that decisions on zoning and building are best left to local and state authorities in the Keys, and not to the Federal Government.

My constituents, both homeowners and developers, recognized the risk of their investment, but the future denial of services like Federal flood insurance will deny them the opportunity to rebuild should more than fifty-percent of the property be damaged by any kind of a disaster or accident. The residents of the Keys are already unfairly being subjected to the "here today, gone tomorrow" availability of this vital assistance as witnessed by the many individuals who have contacted me because they are having trouble selling a finished property which has wrongfully been included in the CBRS. It would seem that many people will be drastically affected by boundaries which, in my opinion, are unusually arbitrary in their determination.

Furthermore, I have serious doubts as to the accuracy of DOI's recommendations. For example, the Card Sound Bridge—an important alternative evacuation route from northern Key Largo—has been included in the system. On page IV-16, of the Legislative Environmental Impact Study (LEIS), DOI failed to note that in addressing evacuation of the Keys. This roadway is one of two bridges linking the mainland to the Key Largo. I have also noticed that on the map for the Big Pine Key area the DOI has listed as "under construction" a bridge which was completed in the early 1980's. The most accurate maps available, Monroe County zoning maps, were not used. It seems to me that, any plan to address the issue of the Florida Keys, should use up-to-date maps and information.

It is my understanding that the legislation which you, Mr. Chairman, have introduced will work backwards and take out those who should not be included. I think we could save a lot of time, work and money by dropping the Keys from the proposal right now. But—and I understand the reasons for using a "work backwards approach"—I believe there are some serious questions which, in the interest of fairness to all involved, must be addressed.

First, are you going to ensure that finished and standing property is not included in the CBRS? In my opinion, no standing and finished property can be included nor should any vacant property be included where an individual has held the deed for many years. I say that because these are people who have planned to build and retire; they are not speculators and therefore deserve consideration.

Second, for those who own property which has been recommended for inclusion, who will be responsible for the burden of proof? While the individual property owner has the most to lose, he clearly should not be responsible for proving he does not belong. I strongly believe that the burden of proof must be on this Subcommittee or DOI to show that these parcels belong in the CBRS. The American judicial system works under the presumption of innocence; the issue of the Keys in the Coastal Barrier Resource System must evolve around the presumption of development. Some may argue that this has already been done, but there has been no consideration on a case-by-case basis.

Third, what sort of appeals process will be made available to people who are wrongly included? As I study these maps, the answer is clear to me that should you selectively include the Keys, no matter how extensive and comprehensive the approach used, errors will be made. Those who are wrongly included this time around should not be made to pay for someone else's mistake.

Fourth, are you going to include some sort of grandfather clause to allow those who, for many years, have planned to build on properties which are currently undeveloped? In my opinion, you must seek to not impair a long-term, individual deed holder who for many years has planned to build. Many of these own property which already has all the infrastructure in place, but is waiting to be built on. Many of these people are not wealthy and would not be able to afford the types of insurance needed to build on their property. "In the absence of Federal assistance . . . high-cost developments are constructed only by wealthy individuals or large developers," (according to LEIS, Chapter IV, pages 12-13). One can claim that is the chance they took, but I cannot, and will not, agree with that kind of rationale for individual land owners who have held on to their property for many years not only as an investment but as a place to build their home.

Inclusion of the Keys would lead to the previously mentioned big developments or, as the LEIS points out, "beach or fishing shacks." (LEIS Chapter IV, Page 13). This is the section in which DOI evaluates the "impacts on aesthetics." The residents of the Keys have long sought to avoid, and traditionally opposed, large scale

developments which cater to non-residents. Such developments would tarnish the aesthetic atmosphere which the residents of the Keys cherish.

I have already been contacted by several constituents whose properties have been included while their neighbors' have not. Some of these individuals are homeowners, while others are businessmen. I am deeply alarmed because these properties are not on undeveloped land, as the report would have one believe. The Department's rationale for inclusion of many areas of the Keys is that they are undeveloped and unprotected, yet many of these properties contain standing and finished structures. It is my understanding that the Coastal Barrier Research Group used a formula to determine what is "undeveloped or unprotected" in order to draw the boundaries for inclusion into the CBRS, but I have serious questions as to the equity of this formula since many people seem to be unfairly and erroneously included.

I do not find the recommendations of the Coastal Barrier Study Group to be constructive; in fact, I find them to be counterproductive and detrimental to the thousands of residents of the Keys. I strongly oppose the inclusion of the Florida Keys in the Coastal Barrier Resource System, and I strongly urge you to reject the Department of the Interior's recommendation to include significant portions of the Florida Keys.

Mr. STUDDS. Thank you, Mr. Fascell. That was a virtuoso performance.

Let me say I interpret much of what you have to say to be an absolute imperative this Committee visit Key West in the not too distant future. Is that what I hear you saying?

Mr. FASCELL. Absolutely. The quicker you will visit us, the happier we would be.

Mr. STUDDS. You won't have any objections from us.

[Laughter.]

Mr. LYTTON. Mr. Chairman, may I present you with a grain of Florida sand?

Mr. STUDDS. I don't know if I can deal with emotion like that at this hour of the morning. We appreciate that.

[Laughter.]

Mr. FASCELL. Was that the bells on a vote?

Mr. STUDDS. That was. We have a vote on the floor.

First of all, let me say thank you for the gift. I will try to keep this completely distinct and separate from Cape Cod sand. There won't be any question. Thank you very much.

Obviously, the question with respect to the Florida Keys is probably the most single difficult and complex and potentially contentious one that we face in the reauthorization and amendment of the Act. We will continue to listen with great care to what you say.

Just for your information, I don't want to prolong this segment of the hearing this morning. We're going to have to adjourn for a moment to vote. But I'm going to give the Interior Department experts who are here a chance to respond, not to argue with what you've said, but to explain for the record why they propose this change so that we have that on the record. If you or your folks wish to stay for that, I'm sure you will want to hear what they have to say.

I appreciate your eloquence as usual, Mr. Chairman. I'm honored to serve under you in another committee, and it will be an even greater honor to visit South Florida one of these days. We'll try to work that in.

Mr. FASCELL. Well, we're anxiously awaiting all Members of the Subcommittee.

Mr. STUDDS. We're anxiously awaiting the seasonal change before undertaking that.

[Laughter.]

Mr. STUDDS. Does anyone want to make a quick observation here? The gentleman from New Jersey?

Mr. SAXTON. I would just like to thank the gentleman from Florida for being here to express his views, and to say on behalf of those of us on this side of the aisle we appreciate very much the position you find yourself in. And as being one who represents some coastal territory, some coastal area myself, I would say that I'm sure, like Florida and like the Keys, the coast of New Jersey—when I fly over it or when I get a chance to look at it from a little different perspective than just being on the ground and playing and having fun and worrying about the environment, when I look at it from a different angle, I oftentimes think if they developed those barrier islands any more they're going to sink.

Today, in New Jersey, we've developed all the barrier islands, and we have single family houses on them, and now we're tearing down the single family houses to build condominiums. And obviously that is a great concern to us from an environmental point of view. It's, obviously, also a great concern, as you point out, Mr. Fascell, to the people who own land there because they obviously want to get the most value they can out of their land.

I would also just go on to point out, Mr. Chairman, that in New Jersey, through the cooperation of the Federal and the State government, we have passed laws and now have statutes and regulations on the book that protect 1.1 million acres of the southern part of New Jersey through a system known as the National Pinelands Preserve. And it is a concept which I think this Committee and others, particularly Interior—in fact, the Secretary of Interior was in New Jersey not long ago to look at the pinelands and the way the system that we have employed to protect it, which relates to the very subject that we're here talking about today, how to protect land without costing the Federal Government more than we can afford. And so there are things that we can do and that we have done that we ought to look at as lessons to be learned for the future relative to subjects like the one that this bill addresses.

Mr. STUDDS. I thank the gentleman.

Maybe at long last we can resolve the mystery that's always befuddled me as to why substantial numbers of my constituents who live on Cape Cod in the summer are drawn to your area in the winter. I've never understood that. We'll get to the bottom of that.

Mr. PLUMMER. Our formal hearings mean shoes optional.

Mr. STUDDS. I understand.

Thank you, gentlemen.

Mr. FASCELL. Thank you very much.

Mr. STUDDS. We stand adjourned for approximately 10 minutes.

[Recess.]

Mr. STUDDS. We will resume.

And before we go to our first panel, I'm going to ask the Department of the Interior, not so much, as I said before, to respond in an argumentative fashion to the testimony of Congressman Fascell, but to state for the record so we have them standing together for our own purposes of perspective, the reasoning of the Department of the Interior in recommending that the Florida Keys be included within the system.

And I suppose it's Mr. Frank McGilvrey of the Fish and Wildlife Service who should be called upon for that chore.

Mr. McGilvrey.

Mr. McGILVREY. Thank you, Mr. Chairman.

The reason that the Department of the Interior recommended that the undeveloped, unprotected portion of the Florida Keys be included in the system, was a decision made by the Department that all undeveloped, unprotected coastal barriers along the Atlantic and Gulf Coast be included in the system.

The criteria were that the area be undeveloped, unprotected, affected by wind, wave, and tidal action, and protect associated aquatic habitat. We recognize that the Florida Keys certainly are not shifting sand islands.

We also recognize, however, that the Florida Keys are subject to a higher level of hurricane activity than any other area in the country. Although there have not been any hurricanes in recent years, this does not mean that hurricanes will not occur in the future.

In addition, we recognize that although the islands themselves may not move, the people and structures on them can certainly move in a hurricane.

We also want to point out that there are other areas proposed for inclusion in the system that do not meet the original statutory definition of a coastal barrier—areas in New England; secondary barriers; coastal cheniers in Louisiana; cemented sand dune areas in Puerto Rico; and mangrove areas in Florida, Texas, Louisiana, and Puerto Rico.

The decision was made that if a barrier was affected by wind, wave and tidal action, and if it protected associated aquatic habitat and was undeveloped and unprotected, it should be included in the system.

Mr. STUDDS. Thank you very much, sir.

If there are no questions from Members, we will go directly to our panel. We have three of four people here I gather. Mr. Janneretn has airplane problems.

We will go with you in the order in which you appear on the list. I gather you have been asked, requested, told and beseeched to keep your oral comments to no more than five minutes. I know that's hard. Your written statements will appear in full in the record. We will hear the entire panel, and then we will have whatever kind of colloquy the Members wish to have.

We will begin with Mr. Jay Hair, President of the National Wildlife Federation.

Mr. Hair, welcome.

STATEMENTS OF PANEL, INCLUDING JAY D. HAIR, PRESIDENT, NATIONAL WILDLIFE FEDERATION; DAVID KEATING, EXECUTIVE VICE PRESIDENT, NATIONAL TAXPAYERS UNION; DR. ROBERT C. SHEETS, DIRECTOR, NATIONAL HURRICANE CENTER, DEPARTMENT OF COMMERCE; AND MARTIN JANNERETH, CHIEF OF SHORELAND PROTECTION UNIT, MICHIGAN DEPARTMENT OF NATURAL RESOURCES

Mr. HAIR. Thank you, Mr. Chairman. It's a pleasure to be here.

Let me start by very warmly congratulating you for your very positive and important leadership on these issues for a number of years. It is very much appreciated by all of us in the environmental community.

I am honored today to present the views of 15 major environmental organizations all across America, ranging from the American Littoral Society to the Coast Alliance to the Great Lakes United to the Mision Industrial de Puerto Rico to the Natural Resources Defense Council, to the Sierra Club.

Our memberships collectively represent the views of several million Americans.

You spoke in your opening comments, Congressman Studds, about the values of coastal barriers to fish and wildlife resources. I won't go into great detail on that, but these resources certainly are the principal reasons that we are concerned about coastal barrier protection. They provide the habitat, I might add, for 20 Federally-endangered or threatened species, and more than two-thirds of the Nation's commercially-important fish and shellfish rely on coastal barriers.

But let me speak now to the reason that we are concerned about this legislation and why we so enthusiastically support it.

A study, done in 1981, which provided much of the impetus for the original passage of this Act in 1982, indicated that the Federal Government was subsidizing coastal development at a cost of $50,000 per acre.

The Federal Government, with the passage of H.R. 2840, could save approximately $11 billion by including the areas that you're advocating into the system.

There are three major provisions of the legislation that we want to highlight today and that we enthusiastically support. First is the inclusion of the Great Lakes area. All along the shoreline there, development has threatened it with extreme fluctuations in lake levels. Thus we believe that area now should be included within the coastal barriers protection legislation.

Second, we are very supportive of the mapping of the Pacific Coast. And third, notwithstanding the very eloquent remarks made by Congressman Fascell a few moments ago, we strongly support broadening the definition of coastal barriers to include barriers not made of unconsolidated sediments such as those in the Florida Keys, Puerto Rico, and the Virgin Islands. This would help protect unique coral reef ecosystems, help address the population growth and construction that has so outpaced the infrastructure capacity of the area.

Quite simply, the American people should not be asked to subsidize destruction of the Florida Keys.

There are a couple of major provisions that I would like to mention that we oppose as currently structured in the legislation.

First, one involving exclusion of military and Coast Guard lands, we certainly support maintaining those areas under these agencies' jurisdiction because they are indeed vital to national security. However, not all defense activities on system units are essential for national security.

For example, Camp LeJeune in North Carolina is proposing to build a beach clubhouse on lands that would be included in the

Coastal Barrier System. We don't think that is vital to national security.

The proposed construction of a commercial spaceport at Eglin Air Force Base in Florida is another example of lands that could be included in the Coastal Barrier System that's not vital to national security.

We also are opposed to the exclusion of major navigational channels because exemptions for increased system development are simply contradictory to the Act's goals.

For instance, channel enlargements in Florida will increase impacts to fish and wildlife resources, most notably manatee collisions with boats. In Texas, they will accelerate the erosion of vital wintering whooping crane habitat.

The amendments needed to H.R. 2840 are inclusion of these otherwise protected areas. Exemptions already exist for appropriate activities on these areas, and thus these areas are not truly protected.

For example, a hotel and convention center within the Gulf Shore State Park in Alabama received Federal flood insurance. We think that's inappropriate.

In Texas, state agencies have attempted to lease State-owned wetlands in the Meridian State Park and the Brazos Island State Park to developers for golf courses and resort developments. That too, is inappropriate.

Were it not for public protest, huge visitor centers and associated buildings would have been built on Plum Island National Wildlife Refuge and the Parker River National Wildlife Refuge in Massachusetts, rather than on the adjacent mainland. We feel strongly that those sorts of matters should be addressed with this legislation.

Let me conclude by commending you once again, Congressman. We are very supportive of this initiative, and we look forward to working with you and others for its successful passage.

Thank you, sir.

[The statement of Mr. Hair can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much, sir, and thank you for the work that you and the Federation does.

Next Mr. David Keating of the National Taxpayers Union.

Mr. Keating.

STATEMENT OF MR. KEATING

Mr. KEATING. Thank you, Mr. Chairman, for the opportunity to appear today before the two subcommittees, and I also congratulate you on this excellent legislation.

I appear representing the 200,000 member National Taxpayers Union, and we are concerned also with the environment, but more specifically in this case with conserving our precious Federal tax dollars.

We strongly supported the 1982 bill, which prohibited the Federal Government from subsidizing development on shoreline included in the Coastal Barrier Resource System. And we strongly support expanding the system as proposed by this bill. It would stop unwise

Federal subsidies for development on these ecologically fragile coastal areas while saving taxpayers up to $9.3 billion over the next 20 years. And we think it's high time that Congress stopped throwing our tax dollars out to sea by passing this legislation.

It is a logical extension of the original bill. The 1982 legislation has already saved almost a billion dollars. Yet the Federal Government still subsidizes development on many unprotected, undeveloped barrier islands.

A study by H. Crane Miller, which the National Taxpayers Union and the National Wildlife Federation released earlier this year, concluded that expansion of the existing system to include the additional acreage recommended by the U.S. Department of the Interior on the Atlantic and Gulf of Mexico coasts, could lead to direct savings to the Federal Government of between $1 billion and $9.3 billion over the next 20 years, depending on how intensive the development is.

Now, this is just over the next 20 years. The savings continue well into the future. So the savings, if anything, are conservative and understated. They don't include mapping costs, which are not fully reflected in the flood insurance program today, maintenance costs of infrastructure that would be built, and it also excludes some catastrophic expenses from major hurricanes. So they are conservative estimates.

I have attached Mr. Miller's study to my testimony, and I hope that it will be included in the hearing record.

The bill would continue to allow development on land included in the system. Private property rights remain untouched. The bill simply says that if you want to develop on a barrier island, you have to do so without taxpayer support. To build in these environments might be unwise, but for the Federal Government to subsidize such development is irresponsible while we have a $2.7 trillion national debt.

We strongly agree with the proposed change that would allow inclusion of non-sand coastal areas for protection.

I would like to also mention briefly three provisions that Mr. Hair talked about. We also think that blanket exclusion of DOD areas from the system is unwise, if nothing else, to avoid hypocrisy.

If the Defense Department or the Coast Guard uses this land for recreational purposes, and uses Federal subsidies for recreational purposes, imagine how local residents would feel. People would see it as being unfair to provide a special privilege for people that work for the Government.

We should try to draft an amendment that would limit expenditure of Federal dollars on these barrier islands to true military purposes or Coast Guard purposes.

We also disagree with provisions allowing funding for improvement of channels for navigation. We think the users should have to pay for these improvements. It's not an appropriate area for the taxpayer to subsidize.

And, finally, one other thing mentioned in Mr. Hair's written statement was to prohibit subsidies for development outside a unit if it is directed at a unit. Perhaps prohibiting such subsidies might be too technical or too difficult to draft in legislation, but I think the concept is sound.

Although this legislation may not be the appropriate time to tackle this, I hope in the future that we can do something to reduce the Federal subsidies for areas that are already developed. It doesn't make a great deal of sense just to ban subsidies on areas that are completely undeveloped while allowing subsidies to continue for areas that are only partially developed, or continue subsidies to areas that have been wiped out by major storms. I hope this is something that we can reform in the future.

So, in conclusion, we would like to strongly support this bill and hope that the Subcommittee, the Full Committee and the Congress will pass it quickly. It can save the Federal Government billions in tax dollars, protect property and lives and help preserve the barrier islands.

Thank you very much.

[The statement of Mr. Keating can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much, sir.

Mr. Jannereth, I'll give you a chance to catch your breath here. We will go next to Dr. Robert Sheets, Director of the National Hurricane Center.

Dr. Sheets, I'm surprised you could be here.

Dr. SHEETS. Thank you, Mr. Chairman. Yes, I'm surprised also.

Mr. STUDDS. You are one of my television heroes I want you to know.

STATEMENT OF DR. SHEETS

Dr. SHEETS. I arrived at about 11 o'clock last night and I'll be leaving this afternoon. It's certainly appropriate for this meeting to be held at this time. We have just had Hurricane Chantel that just moved over some of the barrier islands of Texas. We now have Tropical Storm Dean that's nearing hurricane force.

Mr. STUDDS. That's what I wanted to ask you about.

Dr. SHEETS. All right. It's nearing hurricane force right now, and our models indicate that it will continue on a westward course. And so it certainly plays the potential of having some impact on the continent of the United States in about five days.

Mr. STUDDS. I have a feeling we'll get to know you as well as we did your predecessor.

Those of us who live on or in the water, depending on the conditions, spend a lot of time watching the weather channel in moments of crisis.

Dr. SHEETS. Yes.

Mr. STUDDS. Until the power goes out. I'm hoping that you're right.

The last time I got to know your predecessor well on the television was Gloria and, thank God, you were wrong. Or I probably would not be here.

Dr. SHEETS. I'm sure that we're wrong quite often.

Mr. STUDDS. It was a great relief in that case.

Nice to have you here.

Dr. SHEETS. Thank you.

The mission of the National Weather Service is obviously to protect lives, and that's our primary concern and reason for being

here is to show you some of the problems that we have in protection of lives.

There are also those sort of motherhood statements that are there about protection of property and promote the economic well-being of the citizens of the United States. And the problem is all these things are intertwined. And I have a statement that I have already submitted for the Committee. I would like to introduce that and have that submitted. But what I would really like to do is to use some slides and sort of illustrate our problems, if I may.

Mr. STUDDS. This Committee loves slides.

Dr. SHEETS. All right.

Mr. STUDDS. You can go right ahead.

[Laughter.]

[Slide.]

Dr. SHEETS. For those from Florida, they might recognize this particular picture. And it indicates something that we see along most of our barrier islands, and that is that we build out on top of the sand dunes like this, and then along comes a hurricane and gives us a little gentle reminder that perhaps that wasn't so bright. It reclaimed some of those sand dunes, as well as the property that's built on them.

[Slide.]

Sometimes nature is not so gentle in its reminder. Those from Texas, for instance, remember perhaps that—not necessarily you remember it yourself, sir, but in 1900—[laughter]—there was a major hurricane that moved over the barrier islands of Texas. It was a Category 4 hurricane on our scale of one to five, one being the weakest, five being the strongest.

Galveston was the third largest city in the State of Texas at that time on this barrier island that you see there today—this was in 1900, and this is what it looked like after the hurricane came along. We lost over 6,000 lives over there. Estimates were as many as 8,000 people lost their lives in that incident.

And you see all they could do was to go out with wagons and pick them up like this. They never had time to identify those bodies but get rid of them. Actually burned them.

And that's not something in history. There are also problems we have today.

[Slide.]

This is a hurricane that we had, Elena, in 1985. We had Gloria up the East Coast, but Elena was over there in 1985. And you see all the barrier islands along the coast over there, Dauphin Island in Alabama, Gulf Shores, Alabama, and just right along south of Mississippi.

[Slide.]

Well, let's take a look at the way we build to meet our codes relative to the national flood insurance program on some of these barrier islands. We have to build up to let the storm surge come through underneath, but we don't do a very good job above that. I'm not talking about where they build in this sense, but how they build.

And, indeed, the storm surge there was only about three to five feet in this particular case. And so the pilings protected the house

from the water, but the poor building practices didn't protect it from the wind. So you pay off a little bit.

You see there are some problems on the front of this house. There are greater problems on the back. They did use hurricane clips. You'll see there. They are straps down below. And this was sort of a typical scene.

[Slide.]

Not a whole lot of privacy left in this bedroom or bathroom.

[Laughter.]

One of the things we point out is that sometimes when you have tornadoes, that what you want to do is take protection in an interior room, like the bathroom or the closet. But I don't know what you do when everything is gone.

[Slide.]

Here's an illustration of the problem that we see along the coast. This is a well constructed—well, I won't say well constructed—but a beautiful home that is on Dauphin Island, designed to have breakaway walls down below for the storm surge to come through, and then you live up above.

Well, along came Hurricane Frederick in 1979. You'll notice the wall broke away very well down below, but they also broke away above. No real excuse for that if it had been built properly. It was rebuilt. Along came a tornado in 1982, and it was destroyed again. Collect your insurance, rebuild it again.

In 1985, along came Hurricane Elena, same house, and you'll notice it broke away very well again. But it has been rebuilt, and the individual who owns that has one addition, it has a "For Sale" sign out there in front of it now. Three times and you're out, I guess. But we probably have about a half million dollars in that house, not the individual, but we have about a half a million dollars in that house because of the way they built.

Brand new house, Dauphin Island, never been lived in, and there it is, right after Hurricane Elena.

Along the West Coast of Florida during Hurricane Elena, the storm surge occurred there. And to say that these things only occur in hurricanes is not really true either.

[Slide.]

I was down at Norfolk just about two months ago in an area called Sandbridge. It's just south of Virginia Beach. And this area was affected by a winter storm. You see the septic tank exposed. The individual who lived there put these signs up that say "Keep Off the Dunes." And he should have kept off the dunes when he built the house.

Now, his neighbor over there, he protected his property with rocks. I'm not sure what he's protecting there, but he's certainly an optimistic individual because it's for sale. You could buy it.

[Laughter.]

But it's along the barrier islands and eroding away. The neighbor right next to that is this.

[Slide.]

He protected his property by piling the sand up there. And I saw several houses that have done that. I went around to the side of the building. You see, the garage door is open for some reason. So I

went up close and I see why. So the sand dunes didn't really protect that house either.

And while all of this is going on, with all of that destruction taking place, and nothing more than a little winter storm in that area, right down the road, this house was being built.

[Slide.]

I went in to see how it was being constructed. They told me it was going to sell for $400,000. We've got that problem up and down our coast.

[Slide.]

This is a map of the Galveston area, the Houston-Galveston area. What you see in green is the area that was inundated by the storm surge when Hurricane Alicia came along. That means it was all under water. There was eight to 10 feet of water there. And those areas are where we have to get people out.

[Slide.]

This is the New Orleans area with a Category 4 hurricane. Everything would be under water here. In fact, the City of New Orleans would be under about 14 feet of water. But you see all the area in the delta region down there. And indeed people continue to develop and build in those communities.

[Slide.]

Over on the west coast of Florida, we have the Sanibel Island area, the Fort Myers area, all of those areas. This is a Category 3 hurricane we're talking about here where we have to get people out of those areas when the hurricane comes along.

[Slide.]

Charleston. We lost over 2,000 lives in the barrier islands there in the 1893 hurricane. All up the East Coast here in Atlantic City. You know, every time we put up a hurricane warning, it's $4,000 a second I understand in Atlantic City in casinos, and they really don't like that.

[Laughter.]

It's a problem with all of the coastal developments there. The Congressman from New Jersey mentioned about some of the problems there, and indeed it's total development there, and particularly when you talk about weekend kind of thing.

What happens when we have a hurricane coming along? It may affect the Florida Keys or South Florida like Gilbert could have last year. Let's just displace that track and see what it would mean, for instance, over the Florida peninsula.

Twelve hours before the center of the storm crosses the coast. We've got problems. There are a lot of people that live out in places like this, and we have to get those people out.

[Slide.]

People can live in places like this. And if they don't get out, this is what happens. It's the roads that break away. That's Gulf Shores, Alabama. People who live in places like this, a hurricane comes along, and it's gone.

Obviously we have to get those people out. Look at the narrow little spit of land that all these people live on here. We have to get those people out because the water comes in, the wind comes in, and after the hurricane comes through, the rooms are gutted, you see the concrete floor gone, every window and every door on the

upper floors were gone, and the interior walls were collapsed. So it's not safe places for people to be. Also in mobile homes, that are up and down our barrier islands today.

[Slide.]

Now, about six hours before the center of the storm ever gets there, now all the areas that would be along the coast are essentially cut off. I'm using an illustration here of the west coast of Florida around Fort Myers. And again all the area that's in yellow has to get out. And how do they get people to get out? They all follow these same evacuation routes, where they either live on Sanibel Island, Estero Island, Fort Myers Beach, et cetera, and it really gets complicated, 18 to 20 hours to get people out of that area. Florida Keys, 30 hours to get people out of that area.

If you go to the Florida Keys, you have a low area to get people out, and well before the center gets there, that area is cut off. Those evacuation routes are cut off.

We have been able to avoid a larger loss of life in recent years.

[Slide.]

What this illustrates on the left is the dollar damage that has been going up markedly up until 1970. We now lose over $1.5 billion per year for damage from hurricanes, but it leveled off in 1970. I'll illustrate that in a moment. And yet the loss of life has gone down markedly during the 1900s and we have been able to save many lives.

At the same time, our population growth in the coastal counties has gone up almost assymptopically there. That's the Texas coastal counties, Florida coastal counties. More than nine million people now live just in the coastal counties. Also up the East Coast. And we could go on and on and illustrate this. And if you included some of the summer and weekend residents, this would be off the top of the scale.

[Slide.]

Now it's on the coast. You look at that and you think about how many people would be affected by that hurricane at one time. And it's roughly four to five million people.

Now, why did we level off in terms of hurricane activity, in terms of losses from hurricanes? If we look at only the major hurricanes from 1940 to 1950, they were basically over the Florida peninsula, one up the East Coast, two in the Gulf Coast.

If we look at the decade of the fifties, they were basically up the East Coast. We had Donna down here in 1960 and Audrey in the Gulf Coast area in 1957.

If you look at the decade of the seventies, they were basically over in the Gulf Coast. And if you look at the sixties and then the seventies, you'll see there are very few. I've combined the two here. There's only four in the seventies. If you look at the decade of the eighties so far, there have only been three major hurricanes. And that's the reason that we have not had the major economic losses, even though we are still averaging over $1.5 billion worth of damage per year.

But we do have a hurricane problem in this country.

[Slide.]

If we look at June, most of our hurricanes form over in this area in June. Indeed, we had tropical storm Allison that moved into the

Galveston-Houston area in June this year. In July, they start to form more back towards Africa, but there are very few chances of getting a hurricane in July, for any given coastal area in July about once every 50 years. You get to August where we are at right now, you see the numbers of hurricanes pick up markedly, and indeed the South Florida area is the prime target in August, but anywhere along that coast in August.

You get to September, we've got a lot of problems with hurricanes in September. You get to October, it's primarily Florida, mostly forming over in the western Caribbean, Florida and the East Coast. You get to November, it's almost over. Put them all together and you see we've got a problem around here with the hurricanes.

Well, I think I would like to conclude by showing that, indeed, we do have a hurricane problem. We've been fortunate during the past two decades to have very few hurricanes, major hurricanes that have moved over our coasts. And yet we are still averaging over $1.5 billion worth of damage.

If we had the hurricane, like Gilbert of last year, move on the path that I just put there, the estimate is we would have over $10 billion worth of damage from that one single hurricane moving across South Florida.

Our concern is people. Our concern is getting people back from the coast. The evacuation times are now exceeding 30 hours in several areas. And we believe that if there is development on the barrier islands, that there ought to be appropriate means to protect those lives.

Thank you.

[The statement of Dr. Sheets can be found at the end of the hearing.]

Mr. STUDDS. Thank you, sir. We appreciate that.

And finally Mr. Martin Jannereth of the Michigan Department of Natural Resources.

We will not ask you which airline you were on.

Welcome.

STATEMENT OF MR. JANNERETH

Mr. JANNERETH. Thank you.

Mr. Studds and Members of the Subcommittee, I am Martin Jannereth, Supervisor of the Great Lakes Shorelands Management Unit for the Michigan Department of Natural Resources.

I appreciate the opportunity to testify today on the Coastal Barrier Improvement Act of 1989.

Chris Shafer, who was originally invited to testify, sends his regrets for not being able to attend this hearing.

Of the 112 coastal barriers proposed by the Department of the Interior in the Great Lakes, 75 or 67 percent are in Michigan. Consequently, Michigan has the largest stake of any Great Lakes state in the proposal to incorporate these Great Lakes areas into the Coastal Barrier Resource System.

Michigan has over 3,200 miles of Great Lakes shoreline. Approximately 350 miles of Michigan's coast is classified as an erosion hazard area, and another 300 miles of shoreline is classified as

having significant fish and wildlife habitat, that being primarily coastal wetlands and rookery areas. These areas are identified as high risk erosion areas and environmental areas on Exhibit 1 of my testimony.

These hazard prone areas and the sensitive areas are currently regulated under State law. We consider the proposal to include 75 sites into the National Coastal Barrier Resource System to be supportive of our State efforts to protect these areas and regulate new development.

We believe the 1982 Coastal Barrier Resources Act was an historic and innovative step toward placing the financial burden of storm losses and natural resources depletion away from the Federal Government and on the shoulders of property owners who buy or build in hazardous areas.

Expansion of this program to the Great Lakes and possibly the Pacific Coast makes sense in terms of broadening the scope of the Act into a truly national program. I hope the Coastal Barrier Resources Act and its amendments will become a model for removing Federal expenditures which promote development in any area which poses a large risk of loss of life, waste of Federal revenues, and damage to fish, wildlife and other natural resources.

Such an approach could be applied to floodways and V-zones under the National Flood Insurance Program, highly productive wetlands, and areas of high risk from mudslide, shoreline erosion, and other areas hazardous to development. Further, we believe that current regulations which prohibit Federal funding of sewer lines in designated coastal barriers should not be relaxed.

Michigan has been afforded ample opportunity to review the proposed coastal barrier sites. Starting in 1984, I have worked with the Department of the Interior to review and comment on proposed coastal barriers in Michigan.

Dr. Norb Psuty of Rutgers University and Mr. Frank McGilvrey of the U.S. Fish and Wildlife Service were receptive to proposed changes which Michigan recommended, including the addition of six units to the proposed list.

More recently, Dr. Al Greene, Great Lakes Coastal Barriers' Coordinator with the National Park Service is to be commended for his cooperative efforts. The working relationship he has establish with Michigan has been deeply appreciated. As a result, we have no concerns with the boundaries of the 75 proposed sites in Michigan.

I would like to reaffirm our support for the position that otherwise protected areas, such as publicly owned areas, and areas protected by Federal, State, or local laws be exempted from the system. We believe that inclusion of these areas would serve no useful purpose.

Michigan has, however, a major concern with the impact of the Coastal Barrier Improvement Act of 1989 on our transportation network. The Great Lakes Coastal Barrier Act of 1988, Public Law 100-707, contained an amendment which exempted highways located within the State of Michigan if Congress adds units along the Great Lakes to the Coastal Barrier System. Because the Great Lakes' proposed coastal barriers were not a part of the Coastal Barrier System upon passage of Public Law 100-707, the exception of

Michigan highways was never codified. We believe Michigan highways should be exempted from the Coastal Barrier Resources Act for the following reasons:

First, the present highway system in Michigan already passes through several of the proposed coastal barriers. Consequently, access to these areas is already sufficient to support non-Federal interest development. I would emphasize that the coastal barriers of Michigan are not barrier islands where a bridge or causeway is required. They are part of the mainland.

Since widening the highway for safety reasons would not increase access, we believe the intent of the Coastal Barriers Resources Act and its amendments would be met by exempting Michigan highways.

Second, denial of funds to expand Michigan highways passing through coastal barriers would force the selection of alternate routings which would be eligible for Federal funding. Road relocation would threaten interior wetlands and not reduce access to the coastal barriers by the present road system.

U.S. Route 2 in the upper peninsula of Michigan is an example where a potentially serious mistake could be made by relocating a road from a coastal barrier into high quality wetlands inland of the coastal barrier.

For these reasons, we ask the subcommittees to retain the exemption for the expansion of Michigan highways within the proposed coastal barrier system. If this exemption is retained from the 1988 legislation, we would support the inclusion of the 75 Michigan units into the Coastal Barrier Resource System.

Mr. Studds, this concludes my brief statement concerning our position on the Coastal Barrier Improvement Act of 1989 and the Coastal Barrier Resource System. I thank you for the opportunity to testify. I also commend you and the leadership of this Committee in pursuing a reduction of inappropriate Federal expenditures on undeveloped coastal barriers. I would be pleased to respond to any questions you may have.

[The statement of Mr. Jannereth can be found at the end of the hearing.]

Mr. STUDDS. Thank you very much.

I'm going to start with Mr. Hair. The National Association of Realtors prepared testimony and submitted it to the Committee, although there was no one here actually to present it in person. They said in that prepared testimony, Mr. Hair, that the failure to provide flood insurance for new development in coastal barriers will not stop development but will, instead, result in development that is less safe because the restrictions imposed by the flood insurance program will not apply. They say specifically, and I quote, "Denial of the Federal flood insurance may result in the development of substandard and unsafe housing along the Nation's coasts, truly increasing expenditures at all levels of Government, as well as jeopardizing human life and welfare."

Could we have your reaction to that assertion on their part?

Mr. HAIR. Yes, sir. There has, indeed, been development since the Act was passed in 1982. However, I don't think there is any justification or public support for Americans subsidizing what are in

oftentimes second homes for extremely wealthy people. And that, in essence, is what we're doing.

If there is a problem of development, then I don't see why we have so many developers from Key West here today. Moreover, this pattern is likely to continue on, because I think those who can afford to do it are willing and able to take the risk. We, the American public, ought not to subsidize that sort of risk-taking.

Furthermore, I don't think local zoning commissions are going to allow substandard housing to be built. I think that's their prerogative. The sooner we can get the Federal Government out of subsidizing these activities that don't make sense economically and are destructive environmentally, the better off all interests will be.

Mr. STUDDS. In that same testimony, the realtors cite one of your own Federation's surveys that shows a 40 percent increase in the number of structures on units included within the system. If that's accurate, the study would seem to indicate the system is doing relatively little to discourage development.

What is your response to that?

Mr. HAIR. There are no doubt some areas where single-dwelling homes have been destroyed and replaced by multiple-dwelling condominiums. Again, I think the marketplace should be allowed to make those kinds of decisions. If local zoning ordinance allows multiple-dwelling homes to be built on those areas, then under this provision such activity ought to be allowed. However, on the vast majority of lands we are seeking for protection as coastal barriers, those kinds of activities would occur to any great extent in the future.

Mr. STUDDS. You heard Congressman Fascell's testimony, or I assume you did.

Mr. HAIR. Yes, sir.

Mr. STUDDS. With respect to the Florida Keys, he argued they didn't have the geological characteristics of a coastal barrier; the maps developed by the Department are not entirely accurate; and that it would be unfair to penalize people who have purchased land some time ago and left it undeveloped, maybe for the purpose of ultimately constructing a retirement home. I would assume you don't mean to make the contention that everybody that lives in Key West or even in the Keys is a wealthy person, although having flown over some of the Keys I have some hesitancies on that subject, but certainly not in Key West.

What is your response to that kind of a contention?

Mr. HAIR. Well, I guess if what we heard the Congressman say is correct, that is that oceanfront land is going for $150,000 an acre, my guess is there aren't many moms and pops in America who are going to be participating in that kind of development activity. I also don't think those moms and pops across America ought to be subsidizing those individuals who, for whatever reason, have accumulated that kind of wealth. If those individuals want to make that kind of investment, that's clearly their option and their responsibility to do so. However, I think those kinds of decisions will be governed both by price and by local ordinance and it ought not to be encouraged and assisted by Federal subsidies. It's as simple as that.

Mr. STUDDS. OK. Mr. Keating, the realtors again in this testimony question the accuracy of the report prepared by your group and by the National Wildlife Federation regarding the potential savings of an expanded coastal barrier system. The realtors say, for example, that it appears that several of the assumptions made are incorrect, according to data provided by FEMA, with respect to the flood insurance program. And it goes on to suggest that, as a result, potential savings may be inflated in that study.

Can you comment on those comments, or do you wish to?

Mr. KEATING. Well, I'd have to see the exact technical comments that they're raising. From your question, it's not clear to me what they're criticizing. I would like to re-emphasize that we left several factors out of this study. Maintenance of roads was not included. We did not make estimates for historical rate of hurricane activity on the coastal barrier islands. As we've seen from these slides, recently hurricanes have diminished, but there's no reason to expect that will continue.

So, if anything, I think the estimates are conservative. We also limited the estimate to a 20-year period. We discounted for inflation. So these are not exaggerated estimates. I will look at their detailed comments and submit a detailed response.

Mr. STUDDS. OK. Dr. Sheets, one question on the West Coast, if I may, and the question of whether or not it makes sense to include the West Coast in this program.

Could you comment on whether that coast experiences the same kind of severe storm damage as we do in the Atlantic and the Gulf, and whether development in the Pacific coastal areas raises the same kinds of public safety concerns that you addressed in your testimony?

Dr. SHEETS. The west coast of Florida, yes. The West Coast of the United States, no. We do not get those hurricanes coming up from the Eastern Pacific and moving up on the west coast that causes the kind of beach erosion that we have here. There are other factors other than hurricanes, other weather factors, but hurricanes are not a factor on the West Coast in terms of the coastal developments.

Mr. STUDDS. How about other severe storm damage? They have their own particular brand of catastrophe, I know, in some parts of the West Coast.

Dr. SHEETS. That's correct. Indeed, as I indicated, there are other weather factors. You get the great Gulf of Alaska lows that move down, and, indeed, there's a lot of erosion that takes place as a result of those. But not hurricanes.

Mr. STUDDS. OK. Do we have any idea why we've had so relatively few major hurricanes in the last decade or two?

Dr. SHEETS. I suspect if we had a thousand years of records we'd find these cycles in the past. We have about a hundred years of records. If we look from about 1985 to the present, we may be coming out of that cycle. We are starting to get a few stronger hurricanes, more of those, and so, indeed, we may be coming out of that cycle at this time.

Mr. STUDDS. I'm sorry to hear that.

Dr. SHEETS. I am, too.

Mr. STUDDS. So as far as we know, it's just our lack of perspective that seems to indicate some kind of a deviation here.

Dr. SHEETS. Hurricanes, major hurricanes are rare events for any given location. That's the reason we try to use experiences from one location and bring them to another. We get people that look back on their own history and say, "My house was never affected by a hurricane; therefore, I don't have to move." And then that same person will lose their life. So, indeed, it's our point of perspective as we look back in that sense.

Mr. STUDDS. Is it fair to ask you whether you have any idea at all whether the existence of the law to date has saved lives, or whether the expansion of it is likely to save more lives?

Dr. SHEETS. Well, I think the fact that the law exists makes people aware that there is a problem. What happens when you go to a coastal development and you want to buy a home, and somebody says, well, you have to build it 12 feet above sea level. Why do I have to build it 12 feet? There must have been a problem there. So I think that alone does make people aware of these problems.

I find that the great majority of the people who go to the coast really know very little about hurricanes. Their perception about what a hurricane is is the perception of tornados up in the Midwest and the Northeast. And so the fact that you even had to do that then wakes them up a little bit to these problems.

Mr. STUDDS. Let me suspend for a moment and give other Members a chance. The gentleman from New Jersey.

Mr. SAXTON. Thank you, Mr. Chairman.

Mr. Hair, obviously, as Dr. Sheets is concerned about safety, I'm sure that you're concerned about safety as well. It raises a concern that many of us have about including in the Act restrictions that would affect the building of bridges and roadways which would be intended to evacuate barrier areas where development already has taken place. Can you react to that for us?

Mr. HAIR. Yes, sir. I think the original goals of the Act to eliminate Federal subsidies for flood insurance and to eliminate subsidies for the attendant infrastructure—for highways, for wastewater disposal, for bridges and so forth—are generally good because they remove incentives to develop barrier islands currently not developed.

Obviously, where development is already in place, we must maintain those infrastructures, and that includes whatever is necessary to safely evacuate individuals living there. We have no problems with maintaining that.

What we're opposed to, however, is providing access to areas currently undeveloped which would, in turn, encourage development. These are areas that we do not want to see development occur.

Mr. SAXTON. Thank you.

Mr. Jannereth, how much contact did the Department of Interior have with local communities in developing its Great Lakes coastal barriers recommendations? Are you aware whether or not any town meetings or hearings were held? I know the gentleman from Michigan, Mr. Davis, is concerned with regard to this subject.

Would you react to that for us?

Mr. JANNERETH. I am not aware of any meetings, town meetings or hearings, that were held. They may have, but I'm not aware of

it. I do know that copies of the maps were sent to the respective counties in which proposed areas were identified.

Mr. SAXTON. Are you aware of any local input with regard to the development of the plan for the Great Lakes?

Mr. JANNERETH. I'm aware of some responses, letters mainly to Dr. Greene commenting on various questions, on specific coastal barriers, mainly, from interested property owners.

Mr. SAXTON. Thank you.

Dr. Sheets, with regard to the Federal flood insurance program administered through FEMA, is it your impression that the flood insurance program is administered evenhandedly throughout the coastal areas of the United States? Or do some areas seem to get more attention in terms of stricter compliance than other areas?

Dr. SHEETS. I believe that it's obviously not even because that's just the nature of things, that it's probably not even from one area to another. I think that as we look at the damage that occurs from hurricanes, of course, we've not had many major hurricanes over south Florida recently. So we haven't seen that damage in the Florida Keys that will be there as it was in Donna in 1960 and so on. The problem I see is that if we're going to build there, we must build up, or somebody pays that half a million dollars for that one house that's been destroyed three times. And it wasn't because of the flood insurance program so much but because they did, indeed, build up. And that factor was okay, but above that the code was very lax in what took place there. And so we pay for it whether it's the flood insurance program or whether it's State Farm and Allstate, the other insurance policies that carry on above that. So I think there ought to be a comprehensive act that makes that consistent.

One of the arguments in the Florida Keys that I think Congressman Fascell was alluding to is that by building up with some of these houses, people in the Florida Keys have actually put mobile homes on pilings; you know, essentially manufactured homes. And so you protect yourself from the water, but at the same time you've increased the problem from the wind. And so it gets blown apart, and we still pay for it one way or the other.

So I think that's one of the things that we need a comprehensive insurance act for the entire coastal area that includes the flood and the wind.

Mr. SAXTON. Thank you.

Thank you, Mr. Chairman.

Mr. STUDDS. The gentleman from Delaware.

Mr. CARPER. Thank you, Mr. Chairman.

I want to preface my questions just to share with my colleagues my own plans to introduce legislation to reform the national flood insurance program to ensure more rational development to all of our coastal and riverine areas, not just to underdeveloped or undeveloped barrier islands. I'm currently working with a number of my colleagues on the Banking Committee on legislation which we hope to move shortly after the recess.

Mr. Saxton and I served together on both this Committee and on Banking, and we would certainly invite him to join us. We're working with Doug Bereuter and Ben Erdreich on that. You might like to join us.

In that vein, I think I'd like to, if it's appropriate, Mr. Chairman, I'd like to ask of our representatives—I think the panel of witnesses has already been asked, but I'd like to ask our panel of representatives from the Interior Department what impact the ban on flood insurance availability has had on development in areas protected under the Coastal Barrier System. And I'd like to know if there are any studies on this issue which you might be able to share with us. If you would, identify yourself, please.

Mr. McGILVREY. My name is Frank McGilvrey. I was the coastal barriers coordinator with the U.S. Fish and Wildlife Service.

As part of the CBRA statutory requirements that mandate a five-year update of the System, we acquired new aerial photography of all 186 units in the System in 1987 and 1988.

Mr. CARPER. How many?

Mr. McGILVREY. One hundred eighty-six units are in the System.

One of the things I was interested in, while reviewing the aerial photography, was what development has occurred within those 186 units since 1982. I identified 10 units where substantial development has occurred. You also must keep in mind that a one-year grace period for new Federal flood insurance was granted after the law was passed, from October of 1982 to October of 1983. I am confident that the vast bulk of development that occurred in those 10 units occurred during that one-year grace period. Bethany Beach, Delaware, is a good example of that. Almost all of the HO1 unit was developed during that one-year grace period when landowners could still receive new Federal flood insurance.

We are fairly confident that very little development has occurred within the coastal barrier units since 1983. Those units where development did occur were almost entirely—with the exception of Daufuskie Island, South Carolina— units where infrastructure to the coastal barrier was already available; i.e., bridges, highways, etc. Again, Bethany Beach is a good example of this situation.

Mr. CARPER. Again, are there studies, are there formal studies that have been conducted in this regard?

Mr. McGILVREY. No, there are not.

Mr. CARPER. All right. Fine.

Let me go to Dr. Sheets, if I can, and just follow up on a question I think that Mr. Studds asked you. In working on our national flood insurance program legislation, we've also studied the incidence of storms in the 1950's, the 1960's, the 1970's, and the relative paucity of them, at least those which were very damaging storms, in the 1980's. And I think Mr. Studds has asked what reason the drop in that incidence, what it might be attributed to. Is it just a quirk? Is it just a coincidence?

Dr. SHEETS. Easy answer. I don't know. Again, those are natural fluctuations in the climate that take place, and we really don't know how to sort out those cycles that I showed you. For instance, we had the major hurricanes over Florida in the 1940's. We had them in the 1950's up the East Coast, and in the 1960's in the Gulf Coast. And if they were going to follow that cycle, it ought to have been the 1970's back in Florida, and the people in Mississippi wish that it occurred that way. But it stayed up in the Gulf Coast. But we're just not able to sort those cycles out.

I don't think there's any question that there is going to be a return of those major hurricanes to any particular area. You just have to look at it in a longer time frame because the hurricane is a rather rare event.

Mr. CARPER. All right. A follow-up on a different subject, Dr. Sheets. You talked about a number of problems, significant problems that dealt with evacuation and over-development and exposure to damage. What would be your suggestion on how we can best address those significant problems that you've pointed out?

Dr. SHEETS. Well, there are many economic issues that people have addressed here, and I certainly view some of those economic issues. One is where we already have developed, we ought to do a much better job in terms of the building codes and building practices that are implemented in those areas. For instance, in the State of Florida, just recently, at 2:30 a.m. on the last day of the session of the State, they passed legislation which eliminated the wind-loading requirements for all buildings inside of 1,200 feet from the coast. Now, that was ludicrous, but you know how it works here in Congress on the last day or two of the sessions as to how things happen and get through. And that's what happened there. People didn't really realize what had slipped through in that particular case.

Fortunately, there was a way to rectify that situation, and we were having a——

Mr. CARPER. That's called a veto, I think.

Dr. SHEETS. Well, actually, the Governor let it become law without signing it. He didn't want any part of it either. So what happened was that it became law as of July 1st as a result of this legislation that took place, but within the legislation there was a special committee that was established, a professional committee that was established, to look at the issue, and that committee could reinstate those. And so we were able to get that committee to act very quickly. I testified before that committee last week, and it was reinstated temporarily until we get to look at these things in the future.

My point being is that where we have people on the barrier islands, as I illustrated, in most cases there are not safe places for those people to take refuge, and there are not adequate evacuations. The Florida Keys is a prime example. Marco Island, Sanibel Island, they're all prime examples. Right now in south Florida, there's arguments over four-laning U.S. 1 coming out of the Florida Keys because of evacuations. The slide that I showed you that was cut off, with the water cutting off the road, that was Lake Surprise, it's called. Indeed, people coming out of the Florida Keys are going to be surprised when the hurricane comes up and they think they can get out, because they cannot, well before the center of the hurricane gets there.

So, indeed, to protect the lives of the people that are there today, we need to raise that level and get those people out, four-lane roads to be able to get those people out. It's a two-edged sword. There's the argument on the other side that once you've done that, then you may get more people down there as a result of that. I don't know if statistics show that or not.

Over in the Marco Island area, the same thing. There's a two-lane road going out 951. Big arguments today about four-laning that road, and, in fact, the residents there want to go in with a toll road, if you can imagine that. People actually voting to get a toll road to improve that on one side. On the other side are those who say, again, if we do that, we're going to develop the other 20,000 or 30,000 lots that are already platted, that people would be there, and that would just compound the situation. The same thing with Sanibel Island, and that's up and down our coast today.

Mr. CARPER. Mr. Hair, I think the Chairman asked you a question. I think he asked you to comment on Congressman Fascell's assertion that the Keys should not be included in the expansion of coastal barrier islands legislation. I think you said you differed with Mr. Fascell. Is that correct.

Mr. HAIR. Yes, sir. They should be included.

Mr. CARPER. All right. Let me just ask our other witnesses on this panel if you would also care to comment, as Mr. Hair has, on that aspect of Mr. Fascell's presentation.

Mr. KEATING. We think they should absolutely be included. I represent the National Taxpayers Union.

Mr. CARPER. Absolutely?

Mr. KEATING. Absolutely. It will save money for the taxpayers. We heard earlier of the problems faced in evacuating the Keys. To the extent we can make it more expensive by reducing subsidies to live down there, fewer people will locate. And if there is a major hurricane in the future where people have to get out, if fewer people are living there, fewer lives will be lost.

Mr. CARPER. Mr. Jannereth?

Mr. JANNERETH. I really do not have an opinion on the Keys.

Mr. CARPER. I'm sorry?

Mr. JANNERETH. I do not have an opinion on the Florida Keys. I'm not familiar with it.

Mr. CARPER. All right. Dr. Sheets?

Dr. SHEETS. The Florida Keys are a major problem, but New Orleans is also. In fact, New Orleans is our nightmare in that situation. I agree with Congressman Fascell. I love the Florida Keys. I don't live that far from it, and to go down into the Florida Keys, it's a beautiful place to be.

I believe that it should include some mechanism to protect the lives and property. Whether or not it's included in this Act, I don't know. In terms of the losses of potential life there, there ought to be places of refuge within the Keys that are designed to withstand the strong hurricane because I don't think there's any question that if we have a Gilbert-type hurricane coming along, we're not going to be able to get all those people out.

So I want to see some mechanism to protect the lives of the people there. If we talk about future development there, that's beyond my own studies.

Mr. CARPER. Should the Keys be included as part of the coastal barrier islands?

Dr. SHEETS. I really have not made a study of that. What I'm saying is from my position with the responsibility for providing warnings to protect lives and property in that particular area, that I think we need to do a better job in terms of the way we do the

insurance of existing property there. And we need to do something about the problem that exists now and not compound that problem.

Mr. CARPER. All right. Thank you all.

Mr. STUDDS. The gentleman from Texas.

Mr. ORTIZ. Thank you, Mr. Chairman.

Somebody mentioned the fact that a billion dollars was paid out in claims? Was that you, Dr. Sheets?

Dr. SHEETS. In terms of the actual payouts, it varies considerably. Hurricane Alicia that affected Texas in 1983, the total losses were estimated at $2.3 billion worth of damage. And it was a small hurricane and just barely a Category 3. You take a Gilbert, as I indicated, across south Florida, we're looking at over $10 billion worth of damage.

Mr. ORTIZ. Have we taken into consideration the amount of premiums that are paid versus paid-out claims?

Dr. SHEETS. I think in my own personal view in looking to see flood insurance programs is that clearly people are subsidizing those who live in the highest-risk areas. Indeed, the flood insurance program, people who are living inland from where the major storm surge effects may occur are actually being subsidized by those who live in lesser risk areas. And so they're paying the two to three hundred dollar rates per year, and their risk is really not equivalent to the rate that's being paid on the coast.

Mr. ORTIZ. Because there is a difference, if I'm correct, as to how premiums are adjusted now. Those that have existing construction pay a certain amount of premiums, versus those that are building new construction pay a higher amount. Am I correct?

Dr. SHEETS. I am not familiar with all the details of that, but that's usually what happens because of the grandfathering in of situations.

Mr. ORTIZ. And the reason why I asked this question is because I happen to have a letter from the Federal Emergency Management Agency that was requested by one of my constituents, and he asked, "This is in response to your letter of July 1st inquiring as to whether or not the premiums for flood insurance under the National Flood Insurance Program subsidized the development industry on new construction. Quite the contrary. And as a matter of fact, just the opposite is the case. Part of the premiums that are paid by property owners for their flood insurance for new construction goes to subsidize existing construction."

This is dated July 24, 1987.

Dr. SHEETS. I'm not from FEMA, fortunately, so I really don't know the details of that. But I wouldn't be surprised that, indeed, the rates are higher on new construction as compared to old housing that exists.

Mr. ORTIZ. We appreciate the outstanding work that you all do. Do you still get those, planes, has the administration got any plans to continue to survey hurricanes? Are you okay as far as funding?

Dr. SHEETS. It is a major problem with us. Indeed, we are already on record saying that, indeed, we need the reconnaissance aircraft to provide the kind of warnings that we've been able to provide. As you have seen from slides, we have been able to reduce the large loss of life that has existed from hurricanes through improved

warning processes. And if those aircraft were not there for us, we would have more major problems than we already have.

Fortunately, Congress has supported us on that, but it is an issue that I understand has been introduced by, I believe, Congressman Lewis from Florida and also perhaps Senator Lott on the other side to continue that reconnaissance program. And I hope that we continue that.

Mr. ORTIZ. Do you think that by being able to provide more up-to-date information not only could reduce the lives that would be lost but destruction to property if we do it right?

Dr. SHEETS. I think the property is not really going to change a whole lot, although the longer you can provide lead time for people, then, indeed, they can protect their property. Unfortunately, in Hurricane Chantel that we've just had there, there is at the present time, I understand, 10 people who are still missing in an oil rig that was overturned, and we've lost one or two lives for sure in that particular situation. And so the longer lead time that you can provide, indeed, they can take those actions and protect some 50,000 people that are out there on those oil rigs and barrier islands. So improved forecasts certainly help in those areas.

Mr. ORTIZ. Thank you. I certainly appreciate the rest of the panel members for your testimony this morning.

Thank you, Mr. Chairman.

Mr. KEATING. Congressman, if I could just make a brief comment about your question about the flood insurance program, our study noted that the GAO reported there was an annual average operating deficit for the flood insurance program of $65 million a year between 1978 and 1987. Now, as we've seen from today's testimony, that is during a period of time where we've had relatively few major hurricanes. So I think any actuary who looks at this insurance program would say: If you're running a deficit during that time, obviously there's still a major taxpayer subsidy for this program.

Also, I'm not sure if the GAO includes the costs of administration and mapping. But that's still a substantial amount, and it's during a period of time of relatively few major hurricanes.

Mr. CARPER. Would the gentleman yield for just a moment?

Mr. ORTIZ. I yield.

Mr. CARPER. Mr. Keating makes an excellent point, and it's one that we've pursued in terms of crafting our legislation. In times of relative tranquility in the last decade from major storms, we still find that over the 20-year life of the national flood insurance program, I think payoffs exceed receipts or revenues by about $600 million.

Mr. ORTIZ. You know, I can understand, and I certainly appreciate the gentleman's legislation. But as we look at the economics and as we look at unemployment, those people that work pay taxes also, you know. And we might be saving money on one side, but by not being able to provide jobs on the other side, these people fail to pay taxes into the United States Treasury. And when we curtail small communities from growing, then we have another problem.

But I think that the Chairman has been very kind and very accommodating, and hopefully we will be able to be in a position to work these problems out.

Thank you very much.

Mr. STUDDS. The gentleman from Maryland.

Mr. DYSON. No questions.

Mr. STUDDS. In that case, I have one question that we want to get in for Mr. Jannereth. You suggested all Michigan highways be exempted from the System. The law currently allows, as I'm sure you know, Federal funds to be used for the repair and replacement of roads but not for expansion. Are you foreseeing the need to expand highways in areas that are targeted for inclusion, or are you just concerned about the need to make repairs when you make that suggestion?

Mr. JANNERETH. We are concerned with expansion of existing roads in coastal barriers. There are 13 of the proposed units that currently have State or U.S. highways going through them. U.S. 2 in the upper peninsula has been looked at for a number of years for expansion, and I believe that runs through seven or eight of the 13 units that we're concerned about.

We're not concerned about new highways. Any new construction of new highways should definitely be outside of coastal barriers.

Mr. STUDDS. I understand. I thank you.

I want to thank you all. This is a fascinating as well as a very important and very complex subject. I thank the Interior Department personnel for standing by.

Dr. Sheets, I hope our next meeting is in person rather than on your weather channel.

Dr. SHEETS. See you in about five days.

[Laughter.]

Mr. STUDDS. Thank you. We thank you all.

Without objection, the statement of the National Association of Realtors will be made part of the record.

[The statement of Mr. Gribin can be found at the end of the hearing.]

Mr. STUDDS. The Subcommittee stands adjourned until our next meeting in about five days in Seattle.

[Whereupon, at 12:30 p.m., the subcommittees were adjourned, subject to the call of the Chair.]

[The following was submitted for the record.]

I

101ST CONGRESS
1ST SESSION

H. R. 2840

To reauthorize the Coastal Barrier Resources Act, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JUNE 29, 1989

Mr. STUDDS introduced the following bill; which was referred to the Committee on Merchant Marine and Fisheries

---

A BILL

To reauthorize the Coastal Barrier Resources Act, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Coastal Barrier Improvement Act of 1989".

SEC. 2. DEFINITION AMENDMENTS.

(a) UNDEVELOPED COASTAL BARRIER.—The Coastal Barrier Resources Act (hereinafter in this Act referred to as the "Act") is amended in section 3(1)(A) (16 U.S.C. 3502(3)(1)(A))—

(1) by striking clause (i); and

(2) by redesignating clauses (ii) and (iii) as clauses (i) and (ii), respectively.

(b) SYSTEM MAPS; SYSTEM.—

(1) REPEAL AND ADDITION OF DEFINITIONS.—Section 3(6) of the Act (16 U.S.C. 3502) is amended to read as follows:

"(6) The term 'System' means the Coastal Barrier Resources System established by section 4(a).".

(2) CONFORMING AMENDMENT.—Section 5(a) of the Act is amended in the matter preceding paragraph (1) by striking the term "the Coastal Barrier Resources System" and inserting in lieu thereof "the System".

SEC. 3. COASTAL BARRIER RESOURCES SYSTEM, GENERALLY.

Section 4 of the Act (16 U.S.C. 3503) is amended to read as follows:

"SEC. 4. COASTAL BARRIER RESOURCES SYSTEM.

"(a) ESTABLISHMENT.—There is established the Coastal Barrier Resources System, which shall consist of those undeveloped coastal barriers located on the coasts of the United States that are identified and generally depicted on the maps entitled 'Coastal Barrier Resources System', and numbered and dated as follows:

"(1) A01 through T12, dated September 1982.

"(2) ME01 through VI34, dated December 1988.

"(3) NY01 through WI08, dated June 1989.

"(b) SYSTEM MAPS.—

"(1) IN GENERAL.—As soon as practicable after the date of the enactment of this section, the Secretary shall file the maps referred to in subsection (a) with the Committees, and each such map shall have the same force and effect as if included in this Act, except that the Secretary may make corrections of clerical and typographical errors in such maps. Each such map shall be kept on file and available for public inspection in the Office of the Director of the United States Fish and Wildlife Service and in such other offices of that service as the Director considers appropriate.

"(2) PROVISION OF COPIES TO STATES AND COUNTIES.—As soon as practicable after the date of enactment of this section, the Secretary shall provide copies of the maps referred to in subsection (a) to the chief executive officer—

"(A) of each State and each county or equivalent jurisdiction in which a System unit is located;

"(B) of the coastal zone management office of each State which has a coastal zone management plan approved pursuant to section 306 of the Coastal Zone Management Act of 1972 (16

U.S.C. 1455) and in which a System unit is located; and

"(C) of each appropriate Federal agency.

"(c) BOUNDARY REVIEW AND MODIFICATION.—The Secretary shall conduct, at least once every 5 years, a review of the maps referred to in subsection (a) and shall make, in consultation with the appropriate officers referred to in subsection (b)(2), such minor and technical modifications to the boundaries of System units as are necessary solely to reflect changes that have occurred in the size or location of any System unit as a result of natural forces.".

SEC. 4. CLARIFICATION OF BOUNDARIES.

(a) IN GENERAL.—Not later than 180 days after the date of the filing of maps of the Coastal Barrier Resources System pursuant to section 4(b) of the Act, as amended by this Act, the Secretary of the Interior may make such minor and technical modifications to the boundaries of units of the Coastal Barrier Resources System, as depicted on the maps referred to in section 4(a) of the Act (as amended by this Act), as are consistent with the purposes of the Act and are necessary to clarify the boundaries of those units.

(b) RECOMMENDATIONS OF STATES.—Not later than 90 days after the date of the enactment of this Act, the head of the State coastal zone management agency of each State which—

(1) has a coastal zone management plan approved pursuant to section 306 of the Coastal Zone Management Act of 1972 (16 U.S.C. 1455); and

(2) has within its boundaries a unit of the Coastal Barrier Resources System, as depicted on the maps referred to in subsection (a);

may submit to the Secretary of the Interior proposals for minor and technical modifications under this section to the boundaries of such units within the State.

(c) NOTIFICATION REGARDING MODIFICATIONS.—Not less than 30 days prior to the effective date of any boundary modification made under the authority of subsection (a), the Secretary of the Interior shall submit written notice of such modification to—

(1) the Committee on Merchant Marine and Fisheries of the House of Representatives and to the Committee on Environment and Public Works of the Senate; and

(2) each of the officers referred to in subsection 4(b)(2) of the Act (as amended by this Act).

SEC. 5. EXCEPTIONS TO LIMITATIONS ON FEDERAL EXPENDITURES.

Section 6 of the Act (16 U.S.C. 3504) is amended to read as follows:

"SEC. 6. EXCEPTIONS TO LIMITATIONS ON EXPENDITURES.

"Notwithstanding section 5, the appropriate Federal officer, after consultation with the Secretary, may make Federal expenditures and may make financial assistance available within the System for the following:

"(1) Any use or facility necessary for the exploration, extraction, or transportation of energy resources which can be carried out only on, in, or adjacent to coastal water areas because the use or facility requires access to the coastal water body.

"(2) The maintenance or improvement of existing Federal navigation channels (including the Intracoastal Waterway) and related structures (such as jetties), including the disposal of dredge materials related to such improvements if such disposal is consistent with the purposes of this Act.

"(3) The maintenance, replacement, reconstruction, or repair, but not the expansion, of publicly owned or publicly operated roads, structures, or facilities that are essential links in a larger network or system.

"(4) Military activities essential to national security.

"(5) The construction, operation, maintenance, and rehabilitation of Coast Guard facilities and access thereto.

"(6) Any of the following actions or projects, if a particular expenditure or the making available of particular assistance for the action or project is consistent with the purposes of this Act:

"(A) Projects for the study, management, protection, and enhancement of fish and wildlife resources and habitats, including acquisition of fish and wildlife habitats and related lands, stabilization projects for fish and wildlife habitats, and recreational projects.

"(B) Establishment, operation, and maintenance of air and water navigation aids and devices, and for access thereto.

"(C) Projects under the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 460*l*–4 through 11) and the Coastal Zone Management Act of 1972 (16 U.S.C. 1451 et seq.).

"(D) Scientific research, including aeronautical, atmospheric, space, geologic, marine, fish and wildlife, and other research, development, and applications.

"(E) Assistance for emergency actions essential to the saving of lives and the protection of property and the public health and safety, if such actions are performed pursuant to sections 402,

403, and 502 of the Disaster Relief and Emergency Assistance Act and section 1362 of the National Flood Insurance Act of 1968 (42 U.S.C. 4103) and are limited to actions that are necessary to alleviate the emergency.

"(F) Maintenance, replacement, reconstruction, or repair, but not the expansion (except with respect to United States route A1A in Florida), of publicly owned or publicly operated roads, structures, and facilities.

"(G) Nonstructural projects for shoreline stabilization that are designed to mimic, enhance, or restore a natural stabilization system.".

SEC. 6. SUBMISSION OF MAPS OF PACIFIC COASTAL BARRIERS.

(a) PREPARATION AND SUBMISSION OF MAPS.—Not later than 6 months after the date of the enactment of this Act, the Secretary of the Interior shall prepare and submit to the Committee on Merchant Marine and Fisheries of the House of Representatives and to the Committee on Environment and Public Works of the Senate maps identifying the boundaries of those undeveloped coastal barriers along the Pacific coast of the United States which the Secretary considers to be appropriate for inclusion in the Coastal Barrier Resources System.

(b) CONSULTATION IN PREPARING MAPS.—In preparing maps under subsection (a), the Secretary shall consult with and provide an opportunity for comment by appropriate Federal agencies, State agencies (including the coastal zone management agencies) of the States along the Pacific coast, and the public.

SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

Section 12 of the Act is amended to read as follows:

"SEC. 12. AUTHORIZATION OF APPROPRIATIONS.

"There is authorized to be appropriated to the Secretary of the Interior for carrying out sections 4 and 10 not more than $1,000,000 for each of fiscal years 1990 and 1991.".

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Testimony of Congressman Tom DeLay
for the
Hearing on Coastal Barriers
before the
Fisheries and Wildlife Conservation and Environment Subcommittee
and
Oceanography and Great Lakes Subcommittee
of the
House Merchant Marine and Fisheries Committee

August 2, 1989

Mr. Chairman, I am extremely concerned that the CBRS Report and its subsequent legislation, H.R. 2840, fail to address the universal opposition to increasing the Coastal Barriers Resources System within the State of Texas by all elected officials representing Texans at all levels of government--federal, state and local. It is outrageous that concerns of elected public officials have been wholly ignored as irrelevant.

The State of Texas and in particular, Brazoria County, have an outstanding record of encouraging wildlife conservation while simultaneously supporting vital development. More than 42,000 acres have been preserved for wildlife conservation. Only in Brazoria County can one find one of the world's largest petrochemical complexes coexisting with in harmony with one of our nation's largest bird sanctuaries.

While supporters of the CBRS Report and this legislation may believe that all of the coastal activities which this bill prohibits can be done inland, it is ridiculous to advocate that our ports be built many miles inland when their purpose is to service ships on the water. Ports need to be near the open water. Freeport Harbor has all the natural characteristics to provide the location for a deepwater port which would have the least impact on the surrounding environment.

When the Interior Department submitted its report to Congress on the Coastal Barrier Resource System in December 1988 it made some serious mistakes. In an effort to engulf more land into this program, they have changed the definition of a 'coastal barrier.'

Freeport, Texas, which is in my district, is not a coastal barrier. It is frontal mainland. The islands in this area that are continually identified as barrier islands are not that at all. They are not formed by nature, but only exist because of the Intercoastal Waterway, a man-made canal. Studies have confirmed that if the Waterway were not dredged continuously, they would eventually be filled in by the Brazos River and the diversion channel.

Further, the constant change in the definition of a coastal barrier over the past dozen years has made it impossible for responsible authorities to plan responsible development. As a result of the 1982 law and its definition, the Brazos River Harbor Navigation District formed a master plan for the development of the port of Freeport. This plan was carefully crafted with input not only from the business community, but also civic leaders, elected officials, environmentalists and local citizens.

This plan was designed to properly balance the concerns of all interested parties. Over the past several year, the authority has been acquiring many properties included in

the plan for its future use. In fact, the District has already converted some of this property into a wildlife refuge to demonstrate its commitment to environmentally responsible development.

Congress recently concluded that Freeport is important to our nation's commerce and appropriated $103 million to dredge the harbor. It is ludicrous to invest in this harbor only to restrict severely the taxpayers from realizing the full potential of the port's benefits.

I respectfully request that the Texas coast, and in particular, the Freeport area be removed from the Coastal Barrier Resource System when H.R. 2840 is considered by the subcommittee. The State of Texas and especially Brazoria County have proven to be extremely responsible in managing their coastal resources and need no further interference from the federal government regulators.

Working for the Nature of Tomorrow.
NATIONAL WILDLIFE FEDERATION
1400 Sixteenth Street, N.W., Washington, D.C. 20036-2266 (202) 797-6800

Statement

of

Jay D. Hair

President

National Wildlife Federation

regarding

The Coastal Barrier Improvement Act of 1989: H.R. 2840

Before

the Subcommittee on Fisheries and Wildlife Conservation and the Environment

and

the Subcommittee on Oceanography and the Great Lakes

of the

House Merchant Marine and Fisheries Committee

August 2, 1989

Presented on Behalf of the Following Organizations:

American Littoral Society
American Oceans Campaign
Coast Alliance
Committee To Preserve Assateague Island
Environmental Policy Institute
Friends of the Earth
Great Lakes United
Mision Industrial de Puerto Rico
National Wildlife Federation
Natural Resources Defense Council
North Carolina Coastal Federation
Oceanic Society
Oregon Natural Resources Defense Council
Save The Bay
Sierra Club

THE COASTAL BARRIER IMPROVEMENT ACT OF 1989: H.R. 2840

Chairman Studds, Chairman Hertel and members of the subcommittees, thank you for the opportunity to testify on the Coastal Barrier Improvement Act of 1989, H.R. 2840. My name is Jay D. Hair, and I am President of the National Wildlife Federation. The Federation is the nation's largest non-profit conservation organization, with over 5.8 million members and supporters, and affiliates in 51 states and territories. I am also testifying on behalf of the Coast Alliance, Natural Resources Defense Council, Sierra Club, American Oceans Campaign, Environmental Policy Institute, Friends of the Earth, Oceanic Society, American Littoral Society, Save the Bay, Great Lakes United, North Carolina Coastal Federation, Oregon Natural Resources Council, Committee to Preserve Assateague Island and Mision Industrial de Puerto Rico, Inc. Many of these organizations played instrumental roles in working to pass the Coastal Barrier Resources Act of 1982 and all have had a long-term interest in the protection of this nation's coastal resources.

We would like to commend you, Chairman Studds, on your wisdom and leadership for sponsoring a bill that will help protect valuable natural resources, human life and federal tax dollars. During this time of intense concern over wetland loss, coastal pollution, global climate change and an enormous federal deficit, the introduction of legislation that helps address all of these problems is both laudable and timely. It is our hope that your colleagues will join you by cosponsoring this sensible legislation to expand the 1982 Coastal Barriers Resources Act (CBRA or the Act).

The Functions and Value of Coastal Barriers

The subject of the 1982 Act and H.R. 2840 is coastal barriers -- the islands, spits, beaches, and wetlands lining the perimeter of this country. As the front line of

defense against the ocean's destructive wind, wave and tidal energies, coastal barriers live up to their name by buffering mainland communities and adjacent aquatic habitats from otherwise devastating storm, erosion and flood damages.

These landforms respond to the forces of wind and water by constantly accreting and eroding in a dynamic process that ensures their continued existence. Storms borrow sand from barrier dunes; this same sand is returned to the dunes by fair weather waves. Individual coastal barriers are linked together in a larger sand sharing system which distributes sand up and down the coastline in the direction of the prevailing winds. Unlike other landforms, the mobility of coastal barriers is essential for their survival.

Coastal barriers provide essential spawning, feeding and nursery grounds for a diversity of fish and wildlife species, including more than 20 federally endangered or threatened species. Many of these species use the wetlands which form on the protected landward side of coastal barriers -- one of the most productive ecosystem types in the world. In fact, more than two-thirds of this nation's commercially important fish and shellfish rely on these areas for food or shelter during some portion of their lives. It is estimated that coastal wetlands may produce as much as $5 billion worth of these fish and shellfish each year. Millions of waterfowl and other birds also visit these wetlands in their biannual migrations.

In addition to providing critical habitat, coastal barrier wetlands perform many other valuable functions. Wetland vegetation helps reduce erosion by binding sediment and slowing water flow. These areas also filter toxins and excess oxygen-depleting nutrients which would otherwise pollute coastal waters.

Impacts of Development on Coastal Barriers

Environmental Impacts: Development of coastal barriers, however, interferes with these important natural processes. Erecting structures on these landforms

effectively "straitjackets" them, inhibiting their natural migration and disrupting the natural movement of sand along the shoreline. Given their unstable nature, development on coastal barriers often results in a commitment to protect this development from inevitable erosion and flooding. This is often accomplished through structural stabilization projects, such as seawalls, groins, and jetties, which are costly, only temporarily effective and often intensify the problem elsewhere.

Groins, fingerlike projections built perpendicular to the shore to trap sand, build up one stretch of beach by starving downstream beaches. Robbed of their sand source, these areas begin suffering from increased erosion. Seawalls built to stabilize beaches cause increased erosion in front of the structure, eventually undermining the wall itself and requiring the construction of an even bigger seawall to protect the beach.

Although beach renourishment provides a somewhat less destructive alternative to protecting ill-fated development, these projects too carry an incredibly high price tag while providing only a temporary reprieve from continued erosion. A recent study by coastal geologist Orrin Pilkey found that only 17 percent of 90 renourishment projects along the Atlantic and Gulf Coasts lasted more than 5 years. Despite this poor success rate, Americans have spent over $8 billion over the last 25 years pumping sand onto eroding beaches.

Urbanization of coastal barriers also destroys critical fish and wildlife habitat. Five species of sea turtles are now considered endangered or threatened due, in large part, to the loss and disturbance of sandy beach habitat which they require to lay their eggs. Moreover, despite their unquestionable value to wildlife, already more than half of the nation's original coastal wetlands have been destroyed. The National Marine Fisheries Service has estimated that destruction of these areas between 1954 and 1978 cost more than $200 million in annual fisheries losses. According to the U.S. Fish and Wildlife Service, urbanization is responsible for more than 90 percent of the coastal wetland losses directly attributed to human activities.

Nearshore water quality is also degraded from the pollution generated by shoreline development. Storm run-off carrying pesticides and fertilizers from urban lawns and golf courses, sewer discharges, and petroleum-based pollution from roads drains into coastal waters, impacting important fisheries and other resources. Such non-point pollution has resulted in the contamination of over 40% of the nation's shellfish beds.

Public Safety Impacts: In addition to these environmental damages, development of coastal barriers also results in major public safety costs. Because they are subject to flooding, erosion, sea and lake level rise, hurricanes, tsunamis, and other destructive storms, coastal barriers are very dangerous places to live. More than 13,000 people have died in hurricanes in the United States since 1900. Despite these hazards, however, people continue to flock to the shoreline to live, causing coastal populations to grow at a rate of three to four times higher than in the rest of the country. By next year, over 75% of the nation's population is predicted to live within 50 miles of a marine or Great Lakes coast. In Florida alone, 3,000-4,000 people move to the coast to live each week!

Even on coastal barriers where hurricanes have struck, new growth continues unimpeded. For example, in Galveston, Texas, home to America's greatest natural disaster (over 6,000 people died in the 1900 Galveston hurricane), annual rates for new construction increased from $30 million in 1982 (prior to Hurricane Alicia in 1983) to more than $150 million in 1985.

Increased coastal population density greatly exacerbates evacuation problems during hurricanes and other coastal storms. This is especially true on coastal barriers where evacuation routes are typically few in number and vulnerable to overwash in the mildest of hurricanes. The problem is further compounded by the fact that a 20-year dearth of major hurricanes (winds exceeding 130 mph) has left 75% of coast-dwelling Americans with little or no hurricane experience. Although the standard

National Weather Service evacuation warning is given only 12 hours prior to hurricane landfall (and with only a 60% accuracy), studies have concluded that no coastal county in Florida can evacuate in less than 15 hours. And in the Florida Keys where over 65,000 people will have to drive 150 miles and cross 47 vulnerable two-lane bridges to achieve the safety of the mainland, it is predicted that complete evacuation could take as much as 35 hours.

Economic Impacts: Burgeoning coastal populations and the accompanying growth in coastal property values drastically increase property damages from storms. Statistics from the National Oceanic and Atmospheric Administration show that average property losses from storms rose from $300 million per year during the first third of this century, to a current annual rate of $2.4 billion. This figure is expected to rise to $5 billion annually by the year 2000. Computer models predict that in a catastrophic loss year, the federal flood insurance policies covered under the National Flood Insurance Program could suffer losses as high as $3.5-$4 billion. The All-Industry Research Advisory Council echoed this ominous prediction in a recent report in which it predicts that it is now possible for this country to suffer two $7 billion hurricanes in one year. Such an event, the report concludes, would cause serious economic damage to the insurance industry and major market dislocations.

The federal government, courtesy of taxpayer dollars, pays for a large chunk of these damages through the more than 50 federal disaster assistance programs. Between 1953 and 1985, about 90 percent of all federal disaster declarations were for coastal and riverine flood-related disasters. And according to the Federal Emergency Management Agency, during the ten-year period 1979-1988, federal agencies spent $6.5 billion for these disasters.

The demand for and costs of coastal development protection will be seriously exacerbated by impending sea level rise. In its July 1988 study, Greenhouse Effect, Sea Level Rise and Coastal Wetlands, the EPA predicts an average relative sea level rise of between 4.5 and 7 feet globally by 2100. In low-lying areas such as coastal

barriers, even a small increase in sea level can translate into shoreline retreat of hundreds of feet, making development there even more vulnerable to erosion and flood damages. This problem is further complicated by the fact that the structural stabilization projects built to protect shoreline development from this sea level rise will prevent the natural landward migration of coastal wetlands. The EPA predicts that this will result in a 10-20 percent increase in coastal wetland loss from drowning over the next century.

To make matters even worse, scientists are now predicting that the same greenhouse effect which is bringing us sea level rise, will also cause a marked increase in storm intensity, perhaps as much as 40-50 percent, making hurricanes with winds of 225 mph a realistic possibility.

The Coastal Barrier Resources Act of 1982

In 1982 Congress addressed the severe environmental, economic and public safety costs of coastal barrier development with the passage of the Coastal Barrier Resources Act. The goals of the Act are simple: to minimize the loss of human life, the wasteful expenditure of federal revenues, and damage to the fish, wildlife and other natural resources associated with coastal barriers.

To accomplish these goals, the Act established the 186-unit Coastal Barrier Resources System (CBRS or System) along the Atlantic and Gulf Coasts, encompassing 452,834 acres and 666 miles of shoreline. New development within the System is discouraged through a ban on new flood insurance under the National Flood Insurance Program, and on funding for sewers, roads, bridges, Federal Housing Administration and Veterans Administration housing loans, utilities and other infrastructure. The Act does not prohibit state, local or privately-funded development within the System but simply takes the financial burden of risky coastal development off of the federal taxpayer and places it on the developer. Areas put into the System qualified as undeveloped by containing less than one structure per five acres.

The realization of the magnitude of federal development subsidies in coastal areas was the impetus for denying federal financial assistance to discourage coastal barrier development. A study conducted by H. Crane Miller in 1981 examined coastal development in nine communities adjacent to four national seashores. This study concluded that the federal government spent approximately $50,000 per developed acre in 1980 dollars subsidizing the construction of bridges, sewers, roads, housing, shoreline protection projects, water supply, and wastewater treatment facilities, and disaster relief and flood insurance claim payments. Extrapolating from this research, Miller concluded that by enacting the 1982 Coastal Barrier Resources Act, the federal government could save between $4.1 billion and $11.2 billion over a twenty-year period, depending on the predicted density of development.

Expansion of the Coastal Barrier Resources System

When the Act was passed in 1982, Congress recognized that it had not included all eligible areas within the System or provided complete protection for System units. So in Section 10 of the Act, Congress directed the Interior Department to conduct a study of all eligible areas and to recommend measures to increase the conservation of System resources. After six years and the release of draft reports in 1985 and 1987, the Department delivered its final recommendations to Congress in December 1988.

In its 1985 draft inventory of areas eligible for inclusion within the System, the Interior Department identified more than 2500 miles of shoreline and 5.8 million acres of potential System units on the Atlantic, Gulf, Great Lakes and Pacific Coasts. This acreage included eligible military and Coast Guard lands, as well as federal, state, and local parks, wildlife refuges and recreation areas. In its final report, however, the Department only recommended the addition of 423 miles of shoreline and 790,000 acres along the Atlantic and Gulf Coasts. The National Wildlife Federation and the other conservation groups for which I testify today strongly support the expansion of

the System to include **ALL** eligible coastal barriers on **ALL** four of America's coastlines, and the strengthening of the Act to provide maximum protection of these System resources.

The National Wildlife Federation and the National Taxpayers Union recently commissioned Miller to calculate the amount of federal savings which could be obtained through expansion of the System to the remaining eligible areas on the Atlantic, Gulf, Great Lakes and Pacific Coasts. In **Turning the Tide On Wasted Tax Dollars** (April 1989), Miller found that the federal government could save between $1.3 billion and $10 billion over a twenty year period if the Atlantic and Gulf coast areas proposed for inclusion in the Interior Department's final recommendations, the Great Lakes areas identified by Interior in the January 1988 draft maps, and the unprotected, undeveloped Pacific Coast coastal barriers identified in Interior's 1985 draft inventory were included within the System.

H.R. 2840

H.R. 2840, the Coastal Barrier Improvement Act of 1989 would expand the 1982 System by incorporating the net additions along the Atlantic and Gulf Coast recommended by the Interior Department in its December 1988 report to Congress (790,844 acres and 422.5 miles of shoreline) and the Great Lakes areas identified as eligible by the Interior Department in June 1989 (57,729 acres and 152.6 shoreline miles). It also would direct the Interior Department to re-map within six months the areas along the Pacific Coast which qualify for inclusion into the System.

We support these provisions and feel that, with the addition of a few amendments, passage of H.R. 2840 will go far towards achieving expansion of the System to all eligible acreage and providing strong protection for System resources. In the following pages, I will outline the provisions of H.R. 2840 which the conservation community supports, the few provisions which we would like to see removed from the bill, and additional amendments to H.R. 2840 which would improve the protection of

the nation's undeveloped coastal barriers from federally-subsidized development.

Provisions of H.R. 2840 Which We Support

Expansion to the Great Lakes and Pacific Coast: The National Wildlife Federation and many of the other organizations endorsing this testimony have actively worked on the System designation of undeveloped coastal barriers along all four of America's coasts -- Atlantic, Gulf, Great Lakes and Pacific -- since the System's creation in 1982. **As a result, we strongly support H.R. 2840's Section 4(a)(3) to include eligible Great Lakes areas within the System and Section 6 to map all Pacific Coast areas which meet the criteria for CBRS designation.**

The coastal barriers along these two coastlines deserve and need the System's protection just as Atlantic and Gulf coast barriers do. Although not threatened by hurricanes or sea level rise, the Great Lakes shoreline suffers from extreme and unpredictable fluctuations in lake levels which make development there both risky and costly. It was estimated that the record high lake levels of 1985-86 may have cost as much as $500 million in property damages. Many of the shoreline areas which were under water in 1985, however, are being developed now. In addition to seasonal and annual lake level fluctuations, the Great Lakes are also plagued by storm surges and seiches -- when wind blowing across a lake causes a temporary build-up of water at one end of the lake -- which can cause severe flood damages to shoreline development. By guiding new construction away from these hazard-prone shore areas, System designation will help reduce costly property damage from high lake levels in the future.

Although the Pacific Coast has not yet achieved the population density plaguing the Atlantic and Gulf Coast, the coastal barriers along the Pacific Coast are suffering from intense development pressures combined with fierce winter storms and increasing erosion. According to the EPA, relative sea levels along the Pacific Coast

will rise between 4 and 7 feet in the next 100 years. This will greatly exacerbate erosion and cliff collapse problems. Furthermore, the barrier spits and bay-mouth barriers of the Pacific Coast shelter wetlands which provide critical staging areas for both adult and juvenile migrating salmon and other anadromous fish. Protection of Pacific Coast barriers within the System will help prevent an increase in the number of structures in the path of rising seas and ensure habitat for important fish and wildlife species.

It does not make sense, nor is it equitable, for American taxpayers to withhold subsidies supporting development on Atlantic and Gulf coastal barriers while continuing to subsidize environmentally damaging and economically unsound coastal development along the Pacific and Great Lakes shorelines. Moreover, by continuing to provide financial incentives for development along these coastlines, the federal government is undermining state coastal programs attempting to wisely manage shoreline construction. According to the Turning the Tide report, the federal government could save $1.5 billion through inclusion of the eligible areas on these coasts within the System.

Inclusion of all associated aquatic habitats: Although "associated aquatic habitats" -- "adjacent wetlands, marshes, estuaries, inlets, and nearshore waters" -- were considered an essential component of a coastal barrier in the 1982 Act, these areas were generally not included within the System in 1982. This was because 1982 unit boundaries were based on maps of fastland acreages (land above mean high tide) for the denial of federal flood insurance under the 1981 Omnibus Budget Reconciliation Act (OBRA) which was preempted by CBRA.

We strongly support the addition of these associated aquatic habitats now under H.R. 2840. More than 90% of the acreage proposed for addition into the System by the bill are associated aquatic habitat, and roughly 50% of this is coastal wetlands. Since many of the fish and wildlife resources on coastal barriers which the Act seeks to protect are located in these areas, it is particularly

essential to include these areas within the System. Addition of these areas to the System will also help implement the National Wetlands Policy Forum's and the Environmental Protection Agency's recommendation for "no net loss" of wetlands, a recommendation which has been endorsed by President Bush.

Broadening the definition of a "coastal barrier": Under the 1982 Act, a landform must be composed of "unconsolidated sedimentary material" in order to qualify as a coastal barrier for inclusion within the System. During the past seven years since the passage of CBRA, scientific understanding of coastal processes and landforms has greatly increased. One result is the realization that coastal landforms composed of consolidated materials such as carbonate-cemented or silt and clay deposits also perform the valuable function of buffering mainland communities and adjacent wetlands from the damaging effects of storms. These areas are also often adversely impacted by overdevelopment.

Areas in the Florida Keys are especially threatened by intensive development. The Keys barriers protect valuable seagrass beds and mangroves that provide habitat for the over 500 species inhabiting the waters surrounding the Keys. Coastal development in this region, however, is polluting nearshore waters, threatening the health of the continental United States' only living coral reef system, and destroying habitat critical to many of the Keys numerous endangered species. Destruction of these resources would not only be an environmental tragedy but would also undermine the two largest industries in the Keys -- tourism and commercial fishing -- both of which rely on pristine natural resources.

Inclusion of the Florida Keys within the System will reduce hurricane evacuation problems and the extent of future hurricane disasters. By discouraging overdevelopment, System designation will also help ease the stress on infrastructure and public service capabilities which are currently being outpaced by unchecked population growth and construction. Problems with traffic congestion and overburdened sewage treatment facilities and landfill spaces in the Keys has become

so severe that a moratorium on development throughout much of the Keys has recently been enforced until infrastructure capacities are improved to cope with existing population densities.

The coastal barriers of Puerto Rico and the U.S. Virgin Islands are similarly threatened by development. As coastal populations continue to skyrocket, the unique coastal resources of these two countries are being rapidly destroyed by urban runoff, sewage effluent, dredging, sand mining, and shoreline construction. Inclusion of Puerto Rico and Virgin Island areas within the System will help reduce this environmental degradation.

As a result, we strongly concur with H.R. 2840's inclusion of the Interior Department's recommendation to remove the unconsolidated sediment requirement from the Act. This would allow for the System designation of such areas as granitic outcroppings in New England, carbonate-sediments in the Florida Keys and Puerto Rico, fringing mangroves and their associated reef systems in the Virgin Islands and the Keys, and wooded cheniers in Louisiana.

Inclusion of secondary barriers: Secondary barriers are smaller shoreline barriers created within large bays by internally generated, wind-driven waves. Although these landforms were excluded from the System in 1982, they provide comparable storm protection for mainland communities and adjacent aquatic habitats and have the same composition as ocean-front barriers.

The estuaries associated with secondary barriers also support highly productive wetlands habitat. For example, the Chesapeake Bay provides resting and feeding grounds for more than 75% of the waterfowl that migrate along the Atlantic Coast and in 1983 produced half of the blue crabs harvested in the United States. At the same time, run-off from bayside development greatly exacerbates the water pollution problem plaguing many bays today, causing overfertilization of algae populations and

the depletion of necessary oxygen levels in the water.

We, therefore, feel that the protection of secondary barriers within the System is highly appropriate and support H.R. 2840's addition of approximately 67,000 acres and 170 shoreline miles of secondary barriers within the Chesapeake, Narragansett, Delaware and other bays.

Provisions Within H.R. 2840 Which We Oppose

While we support most of the content of H.R. 2840, it does contain two provisions which serve to decrease System acreage and lessen the protection offered by the Act. We urge the deletion of these provisions from H.R. 2840.

Exclusion of Military and Coast Guard Lands: The System currently includes 4 units containing military and Coast Guard lands, encompassing 15,000 acres and 42 miles of shoreline. Activities in these units which the Department of Defense considers to be essential for national security are exempted from CBRA's federal funding prohibition under Section 6.

The Interior Department has identified another 29 units including 30,000 acres and 42 shoreline miles along the Atlantic and Gulf coasts that qualify for System designation. H.R. 2840, however, follows the Interior Department's final recommendation to delete all existing military and Coast Guard lands from the System and not include any of these new areas. The Interior Department's justification for this exclusion is that all activities occurring on military and Coast Guard lands are essential for national security and, therefore, these areas do not need to be included.

The Defense Department's proposal to build a beach clubhouse on military lands at Camp LeJeune in North Carolina (unit L05), although never carried out, clearly indicates, however, that not all defense spending in System units is necessary

for national security. Another more recent example of non-essential military development that runs counter to the goals of the Act is the proposed construction of a commercial spaceport on the Eglin Air Force Base (unit P31) in Florida.

If military and Coast Guard lands are excluded from the System, such development in these areas would be able to take place courtesy of federal tax dollars despite the fact that construction in these areas is known to be risky and environmentally detrimental. Publicly sponsored development is just as destructive to coastal barriers as privately funded development, so the federal government should be held to the same standards that private citizens are required to meet. We have seen with Defense nuclear facilities that exemption from environmental laws merely increases problems later. We should not repeat that mistake with the CBRA.

We, therefore, recommend that H.R. 2840 be amended to allow all existing military and Coast Guard lands to be retained within the System and to add the additional military and Coast Guard areas identified as eligible for inclusion by the Interior Department. In addition, we propose that a provision be added to the Act clarifying what types of military activities truly qualify as essential to national security and what activities do not.

Exclusion of Major Navigation Channels: An exemption in Section 6 of the Act currently insures continued federal funding for the "maintenance of existing channel improvements and related structures, such as jetties." H.R. 2840, however, would expand this exemption to allow federally funded improvement of existing federal navigation channels and related structures. **We oppose this exemption for federal navigation channel expansion.**

Creating additional exemptions which allow for increased development within the System runs completely counter to CBRA's goals and threatens to undermine the Act itself. In addition to the concomitant increase in federal expenditures, increased

22-692 - 89 - 3

channel dredging will destroy more benthic animal and plant communities. The deepening and widening of navigation channels can also result in significant salinity changes which can adversely impact certain shellfish communities. In addition, channel enlargement also will likely lead to increases in the amount of boat traffic and the sizes of boat using the channel, resulting in greater disturbance of fish and wildlife species. For example, injuries and fatalities to the endangered West Indian manatee from boat collisions can be expected to increase if the Florida Intracoastal Waterway were enlarged. And, according to the U.S. Fish and Wildlife Service, 230 acres of habitat for the endangered whooping crane has already been lost to erosion at Aransas National Wildlife Refuge since the creation of the Gulf Intracoastal Waterway, largely due to waves from boat traffic.

Needed Amendments to H.R. 2840

We recommend that H.R. 2840 be amended to include the following provisions in order to help the System more fully meet its legislated goals to protect coastal resources and reduce wasteful federal expenditures.

Inclusion of otherwise protected areas: The Act currently excludes all areas which are "included within the boundaries of an area established under Federal, State, or local law, or held by a qualified organization as defined in section 170(h)(3) of the Internal Revenue Code of 1954, primarily for wildlife refuge, sanctuary, recreational, or natural resources conservation purposes." These areas comprise about one-third of the coastal barrier acreage on the Atlantic and Gulf Coasts.

The Interior Department examined the possibility of including these areas into the System in its 1985 draft report to Congress and identified the otherwise protected areas on all four coasts eligible for inclusion within the System. In defense of including these areas, the Department cited the recommendation made by the Interior Secretary in his 1982 Report to Congress on OBRA which discussed the "difficulty in determining whether protection is actual or permanent...and the unreasonable

inconsistency in the treatment of undeveloped coastal barriers created by the exclusion [of otherwise protected areas]."

In its final 1988 report to Congress, however, the Department recommended the continued exclusion of these areas, as well as the deletion of all otherwise protected areas inadvertently put into the System in 1982 and units which became otherwise protected in the future. This decision was based on the Department's new assertion that most federally-subsidized development in otherwise protected areas is necessary for public access and visitor accommodation. The Department did, however, recommend the automatic inclusion of any otherwise protected area which was made available for development inconsistent with the purposes of the Act and the long-term conservation of the barrier. It also proposed that System designation be extended to privately-owned inholdings within otherwise protected areas.

H.R. 2840 does not specifically address the policy issue of otherwise protected areas, but by incorporating the Interior Department's proposed maps of System changes, the bill excludes all currently included otherwise protected areas and fails to add any additional otherwise protected areas. To its credit, the bill does provide for the System designation of inholdings within the otherwise protected areas where accurate maps of these properties were available.

The Act already contains exemptions for appropriate activities occurring within otherwise protected areas, such as projects for recreation, fish and wildlife habitat enhancement, and scientific research, as long as they are consistent with the purposes of the Act. As a result, we believe that if these areas are truly protected as their title would suggest, then System designation would not inhibit any normal activities within their boundaries. If, however, the protection provided for a particular area was inadequate, then CBRS designation would be a deterrent against inappropriate uses of this area.

A good example of this is in Texas where state agencies have a checkered

past with the management of the state's huge tracts of coastal aquatic habitat. Several years ago, the Texas Parks and Wildlife Commission leased 79 acres of golden-cheeked warbler habitat in the Meridian State Park for the proposed development of a golf course. More recently the Texas General Lands Office (GLO) attempted to lease the 216-acre Brazos Island State Recreation Area for development within Playa del Rio -- a proposed 12,000 acre, 71,000 unit development project. Fortunately, in both instances, public outcry was great and the leases were dropped.

In 1987, Interior ruled that coastal lands managed by the Texas School Land Board (SLB) or the GLO did not qualify as otherwise protected. In response, the SLB and GLO promulgated rules specifically granting all state areas identified in Interior's 1987 draft System inventory (nearly 200,000 acres) the protective status which would qualify them as otherwise protected under CBRA. Given the state's poor track record and that these rules were developed simply to exclude these lands from the System, one must be skeptical about the degree of protection these lands will actually receive.

There are numerous other case studies of inappropriate development which has occurred or been proposed within the boundaries of otherwise protected areas. Foremost in this category is Gulf Shores State Park in Alabama where a hotel and convention center were constructed within park boundaries prior to 1982 and currently receive federal flood insurance. Another example is Assateague National Seashore, where non-tidal wetlands are currently being filled and paved for campground pads and the once-permeable two-lane campground road has been straightened, widened and repaved with the hopes of attracting additional visitors. On the same island at the Chincoteague National Wildlife Refuge, there is an on-going debate over whether to sacrifice refuge habitat on the island to build an enlarged visitors center and several maintenance buildings or to locate these structures on mainland refuge property where they would cause less environmental damage and be less threatened by hurricanes and sea level rise. The town of Chincoteague is also pressuring the refuge manager to rebuild a road and parking lot which have already been washed out several times and lie adjacent to habitat for the endangered piping plover.

Additional examples include Plum Island National Wildlife Refuge and Parker River National Wildlife Refuge in Massachusetts where it took continued pressure from conservation groups to prevent the construction of new visitor centers and other associated buildings on the barrier islands themselves rather than on adjacent mainland sites. Although these incidents were satisfactorily resolved, federal policy should not be to rely on public outrage to prevent federally-subsidized and environmentally destructive development within the nation's parks and refuges.

It is clear that so-called otherwise protected areas are not safe from environmentally damaging and economically unsound development. **We, therefore, recommend that H.R. 2840 be amended to include all eligible otherwise protected areas within the System.** Adding otherwise protected areas to the System would provide them with another layer of needed protection and guarantee that federal taxpayers were not underwriting the destruction of the parks, seashores, refuges and recreation areas they love. System designation would not prevent the construction of needed interpretive and recreation facilities, but would simply ensure that such development was consistent with the goals of CBRA .

Automatic inclusion of excess federal lands: In its final report, the Interior Department recommended that all surplus federal coastal barrier lands be automatically included within the System prior to disposal if they meet the Act's criteria for System designation. Due to the intense development pressure in many coastal areas, excess federal lands could easily be sold for development counter to the goals of the Act, if federal development subsidies were to continue to remain available to the new property owners. Automatically including such lands within the System would help achieve consistency between the goals of CBRA and the federal government's land selling policies. **We recommend that a provision be added to H.R. 2840 to automatically add eligible surplus federal lands to the System before they are sold.**

Prohibition on Federally-funded Activities Affecting System Units: In 1987 the Interior Department considered a proposal to deny federal funding for projects occurring outside the System but which directly affected a unit within the System. Unfortunately this proposal was not included in either the Interior Department's final recommendations or H.R. 2840. Interior opted to allow federal agencies the discretion to consider such projects on a case-by-case basis although the Department acknowledged in its final report several instances where agencies have chosen to fund activities which promoted development of a System unit.

Without a prohibition on such funding, the federal government will continue to undermine the intent of CBRA to prohibit federal assistance which encourages development of System units. A current example of this is the proposed granting of a free easement of military land to developers for the construction of the Mid-Bay bridge from the Eglin Air Force Base across the Choctawhatchee Bay to Moreno Point (unit P32) in Florida. Although this island is currently undeveloped, it has been platted for development and bridge access will certainly facilitate these efforts. In its Finding of No Significant Impact, the Eglin Air Force Base itself admitted that the project is expected to "encourage the development of a unit in the coastal barrier system."

We strongly support an amendment to H.R. 2840 which would prohibit federally funded activities, such as construction of wastewater treatment plants or bridges, which are specifically directed to a purpose within a System unit which is incompatible with CBRA's goals, even if the activity occurs outside the unit.

Federal Regulatory Consistency: Although the Act prohibits most federal financial assistance for new construction within System units, it does not prevent the issuance of federal development permits. Several federal agencies, including the U.S. Army Corps of Engineers, Environmental Protection Agency and the U.S. Coast Guard, administer regulatory programs for activities on coastal barriers. Between October 1982 and April 1985, over 250 federal permits were issued for construction

projects on or adjacent to coastal barriers within and outside of the System.

By providing federal permits for new development within the System, the federal government appears to be condoning System development at the same time that CBRA is attempting to discourage it through a ban on federal financial assistance. Requiring federal regulatory consistency would remove this counterproductive contradiction and further CBRA's goals by providing an additional disincentive for environmentally damaging and hazard-prone coastal development. **We, therefore, recommend an amendment to H.R. 2840 that would prohibit the issuance of any federal permits within the System which are inconsistent with purposes of the Act.**

Improved annual compliance certification: Federal agencies are required by Section 7 of the Act to annually certify their compliance with CBRA by submitting an annual letter to the Office of Management and Budget (OMB). OMB then provides this certification to Congress. Because OMB does not have the authority to audit federal agencies to verify these agency compliance assertions, however, this certification requirement amounts to little more than a paper-pushing exercise.

Since CBRA's funding prohibition for new development in the System is the heart and soul of the Act, compliance by federal agencies is essential. **We propose that the Coastal Barrier Improvement Act of 1989 amend the 1982 Act by requiring federal agencies to certify their CBRA compliance with the General Accounting Office which has the authority to audit agencies' expenditures.**

Preparation of a Joint Study: A significant portion of the American coastline -- approximately one-third of the Atlantic and Gulf Coast -- has already been developed and is, therefore, not eligible for inclusion within the System. Both opponents and proponents of CBRA designation have remarked upon the inequity of removing federal subsidies on undeveloped coastal barriers while continuing to subsidize and

resubsidize development on developed barriers when they are devastated by storms, flooding, or erosion.

In its final recommendations, the Interior Department proposed that an interagency study be conducted to examine various options to address the issue of federal subsidies on both undeveloped and developed coastal barriers. **Given the imminent conflict between sea level rise and coastal overpopulation, we recommend that an amendment be added to H.R. 2840 to require that such a study be undertaken. This study should include an examination of the magnitude and impact of tax policies, such as casualty loss deductions, which encourage coastal development.**

Conclusion

It is rare when we have an opportunity to protect our environment and save precious federal tax dollars at the same time. Members of Congress and President Reagan recognized this same opportunity in 1982 when a Democratic House and a Republican Senate and Administration passed the original Coastal Barrier Resources Act. This unique legislation occurred in an atmosphere of bipartisan cooperation which joined environmentalists with public safety proponents and fiscal conservatives. It is our hope that this same Congressional and Administrative cooperation can be achieved again with the expansion and strengthening of this important program. We urge the members of the two committees to join Chairman Studds in promoting the passage of the Coastal Barrier Improvement Act of 1989 with our recommended amendments. Our coasts depend on it and so do our wallets. Thank you for the opportunity to testify.

NATIONAL TAXPAYERS UNION

A NONPARTISAN, NONPROFIT ORGANIZATION DEDICATED TO THE PUBLIC INTEREST

325 PENNSYLVANIA AVENUE, SOUTHEAST WASHINGTON, DISTRICT OF COLUMBIA 20003 TELEPHONE: AREA CODE (202) 543-1300

Testimony of David Keating
Executive Vice President, National Taxpayers Union

before the

Subcommittee on Fisheries and
Wildlife Conservation and the Environment

and the

Subcommittee on Oceanography and Great Lakes Subcommittee
Merchant Marine and Fisheries Committee
U.S. House of Representatives

on
HR 2840

The Costal Barrier Improvement Act of 1989

August 2, 1989

Chairman Studds, Chairman Hertel and members of the Committee, thank you for the opportunity to appear at the hearing today concerning HR 2840, "The Coastal Barrier Improvement Act of 1989." I represent the National Taxpayers Union, a 200,000 member group that is interested in limiting the burden of the taxpayer.

The Coastal Barrier Improvement Act of 1989 would add almost 800,000 acres to the current 453,000-acre Coastal Barrier Resource System (CBRS). Under 1982 legislation, the Federal government is prohibited from subsidizing development on shoreline included in the CBRS on the Atlantic, Great Lake, and Gulf coasts. Expanding the size of the CBRS would stop unwise federal subsidies for development on these ecologically fragile coastal areas while saving taxpayers up to $9.3 billion in federal subsidies. Congress should stop throwing our tax dollars out to sea by passing HR 2840.

The National Taxpayers Union strongly backed the Coastal Barriers

Resources Act in 1982; we continued expressing this support in the 1987 Interior Department's public comment phase for the System's expansion; and we hereby reconfirm this support by endorsing this legislation.

HR 2840 is a logical extension of the Coastal Barrier Resources Act of 1982. That innovative legislation recognized the fiscal and environmental folly of subsidizing development on barrier islands. Since its inception, the Coastal Barrier System has saved the Federal government more than $800 million. Yet the Federal government still subsidizes development on many unprotected undeveloped barrier islands. A study by H. Crane Miller released earlier this year by the National Wildlife Federation and the National Taxpayers Union concluded that "expansion of the existing Coastal Barrier Resources System to include the additional acreage recommended by the U.S. Department of the Interior on the Atlantic and Gulf of Mexico coasts could lead to direct savings to the federal government of between nearly $1.0 billion and $9.3 billion [over the next 20 years alone]. These potential savings represent federal funds that might otherwise be spent under current federal programs if the barriers were developed. These include the major one-time capital costs for urban infrastructure (wastewater treatment, sewers, water supply, water treatment and water distribution, roads, bridges and causeways), and costs for disaster relief, flood insurance subsidies, and shoreline protection over a 20-year period." I have attached Mr. Miller's study to my testimony and respectfully ask that it be entered into the hearing record.

HR 2840 would continue to allow development on land included in

the Costal Barrier Resources System. Private property rights remain untouched. The bill simply says that if someone wants to develop property on barrier islands he must do it without federal subsidies. To build permanent structures in such a capricious environment is perhaps unwise; for the Federal government to subsidize such development is irresponsible.

HR 2840 will save property and lives by discontinuing unwise subsidies for development near the coast on undeveloped barrier islands. Without federal subsidies, developers will think twice before building in such a temporary, hostile environment. Consequently, fewer properties will be constructed in risky areas that are often threatened by major storms.

The National Taxpayers Union believes that the Coastal Barrier Improvement Act of 1989 would save the federal government billions of dollars, protect property and lives on both barrier islands and the mainland, and preserve the barrier islands' pristine environment. With the national debt racing past $2.7 trillion, we can ill afford to pass up an opportunity to save the federal government up to $9 billion.

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STATEMENT OF
DR. ROBERT C. SHEETS, DIRECTOR
NATIONAL HURRICANE CENTER
NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

BEFORE THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
AND
SUBCOMMITTEE ON OCEANOGRAPHY AND GREAT LAKES
COMMITTEE ON MERCHANT MARINE AND FISHERIES
U.S. HOUSE OF REPRESENTATIVES

AUGUST 2, 1989

Mr. Chairman and Members of the Subcommittees:

My name is Dr. Robert C. Sheets. I am Director of the National Hurricane Center for the National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce. I appreciate the opportunity to describe the impact of hurricanes on barrier islands and coastal regions. The Department of Commerce is currently reviewing H.R. 2840, the "Coastal Barrier Improvement Act of 1989", and has not yet taken a position on the bill. I, therefore, will not discuss the specifics of the bill at this time.

Tropical cyclones are recognized as nature's most destructive phenomena due to their frequency of occurrence and size. In the Atlantic, and East and Central Pacific, they are called hurricanes. In the West Pacific, they are called tropical cyclones. In 1970, the loss of life resulting from a single

tropical cyclone striking Bangladesh has been estimated to exceed 500,000 people with some estimates of as many as 1 million dead. In 1900, a hurricane struck Galveston, Texas resulting in more than 6,000 deaths. This is the largest natural disaster in the history of the United States. By comparison, the great San Francisco earthquake resulted in a little over 600 deaths. Nearly 2,000 deaths were experienced in the offshore islands near Charleston, South Carolina from a hurricane in 1893. Nearly the same number of deaths resulted from the 1928 hurricane that emptied Lake Okeechobee onto the surrounding communities of Florida. In 1926, a hurricane caused major damage in southeast Florida with estimates of loss of life ranging from near 250 to 500. In 1935, a hurricane striking the Florida Keys killed more than 400 people. The Great New England Hurricane of 1938 resulted in more than 600 deaths and in 1969 Camille struck the Mississippi coast with winds estimated to be near 175 mph and gusts near 200 mph. This hurricane produced a storm surge (dome of water accompanying the storm as it moved ashore) of 25 feet above normal the waves on top of that. More than 250 people lost their lives as a result of Camille.

We have literally thousands of pictures showing remains of houses on barrier islands and coastal regions that were heavily damaged or destroyed by hurricanes. Several of Camille's victims were actually killed in Virginia as a result of flash floods. However, the great majority of the deaths associated with the

hurricanes that I have mentioned occurred on barrier islands or the immediate coast of the mainland and were the result of drowning.

The permanent populations of the hurricane prone coastal counties of the United States continue to grow at a rapid rate (figures 1,2, and 3). When weekend, seasonal and holiday populations are considered, the number of people on barrier islands - such as at Ocean City, Maryland, Gulf Shores, Alabama and Padre Island, Texas - increase by ten to 100 fold or more. Also, these are subject to inundation from the storm surge associated with the hurricane. It is the rising waters that pose the greatest threat to life. Over the past several years, the warning system has been adequate for providing time for the great majority of the people on barrier islands and along the immediate coast to move inland away from the threat when hurricanes have struck. However, it is becoming more difficult each year to evacuate people from these areas due to the rapidly increasing populations and roadway systems that have not kept pace with the population growth. This condition results in the need for longer and longer lead times for safe evacuation. And, hurricane forecast uncertainties increase as required lead times get longer.

The combination of the risk factor for the growing populations on barrier islands and other vulnerable locations and the uncertainties in the forecasts present major dilemmas for

forecasters and local and state emergency management officials. Preparations for a hurricane are expensive. The average warned area for a hurricane forecast is about a 300 mile section of coastline. The average cost of preparation for the hurricane, whether the hurricane strikes or not is more than $50 million for the Gulf coast. This does not include loss of business costs, etc., but just the cost of boarding up homes, closing down businesses, manufacturing plants, evacuating oil rigs, etc. If the width of the warned area has to be increased by 20 percent due to greater uncertainties in the forecast, the additional cost would be $10 million for each event. If uncertainties in the hurricane strength require warning for the next higher category of hurricane, then there would be major increases in the number of people evacuated and therefore preparation costs.

Of even greater concern to the National Hurricane Center and local and state officials than the economic factor is the protection of life. We and local and state officials of course take economic considerations very seriously. That consideration is not just because part of our mission is to promote the economic well-being of our citizens, but also because people will not continually take expensive actions, which after-the-fact, prove to have been unnecessary. If we consistently overwarn by wide margins, people will not respond and such actions could result in large loss of life. To get a proper response from the general population, we and local and state officials must maintain credibility. To do so, we cannot treat all hurricanes

as if they were Camilles or Gilberts! This exaggerated approach may indeed provide maximum protection of life this time, but endanger many more lives the next time when the threat may even be greater.

The hurricane problem is compounded by the fact that the great majority of people (80 to 90 percent) who now live in the hurricane prone areas have never experienced the core of a major hurricane (Saffir/Simpson scale category 3 or stronger; Herbert, et. al., 1984). Many of these people have been through weaker hurricanes or been brushed by the fringe of a major hurricane. The result is a false impression of the damage potential of the hurricane. This frequently leads to complacency and delayed actions which could lead to large loss of life. That is, people living on barrier islands may be reluctant to evacuate under "blue sky" conditions (situation presently required because of large populations with limited egress facilities) until they see the actual threat (waters rising and winds increasing). The result may be people trapped in those areas as waters cut off escape routes. This situation nearly happened for about 200 people on western Galveston Island during Hurricane Alicia of 1983.

This condition has resulted from three factors. First, fortunately, major hurricanes are infrequent events for any given location. Second, for more than the past two decades, major hurricanes striking the U.S. coast have been less frequent than

for the three previous decades. Finally, it has been during this period of low hurricane activity that the great majority of the present coastal residents moved to the coast. The concern now is that we may not fare as well today as we have in the past if hurricane activity returns to the frequencies experienced during the 1940's through 1960's.

Local governments are faced with serious problems of how to deal with the existing problem and how to avoid exacerbating this problem in the future. For instance, in south Florida alone there are three areas of controversy concerning issues which would help alleviate the current problem of evacuation, but could worsen the problem in the future. These issues involve widening of roads and bridges from the Florida Keys, Marco Island, and elevating the causeway and bridge to Sanibel Island. Indeed, these projects are needed for the protection of the people living in those areas, but such improvements will likely result in amplified growth which compounds future problems.

Gulf Shores, Alabama experienced a major upswing in growth after Frederic (1979). Frederic destroyed the great majority of buildings on the island. Afterwards, new and improved roads, water, sewage and electrical systems were installed. Before Frederic, I believe there was only one condominium on the island. The remainder of the housing was generally single family residents and most of them vacation homes. Last year I counted more than 100 condominium buildings on the island. That is, the

population concentration has been increased by factors of 10 to 100 over those present during Frederic. Will we be able to get those people off the island in the event of a major hurricane threat in the future?

Last May, I visited a barrier island called Sandbridge located just south of Virginia Beach, Virginia. The island is suffering considerable erosion. A new sea wall was undermined and had failed. Some houses were undermined and heavily damaged. With all those factors taking place, just down the road on the same beach was a new house under construction which the builder told me would be selling for about $400,000! As long as people can build in these areas with the economic risk assumed by others, they will likely continue to do so.

In summary, population increases will likely continue along our coasts with a continued upward spiral of economic losses when hurricanes strike (figure 4). These losses now average more than $1.5 billion per year and could be as large as $10 billion if a hurricane like Hurricane Gilbert (1988) were to strike a major metropolitan area such as southeast Florida. More frightening is the potential for large loss of life on barrier islands. If adequate means of evacuation and/or places of refuge are not provided for residents in existing and planned communities, on barrier islands and other vulnerable coastal communities, there will almost assuredly be a significant increase in loss of life due to hurricanes (figure 5).

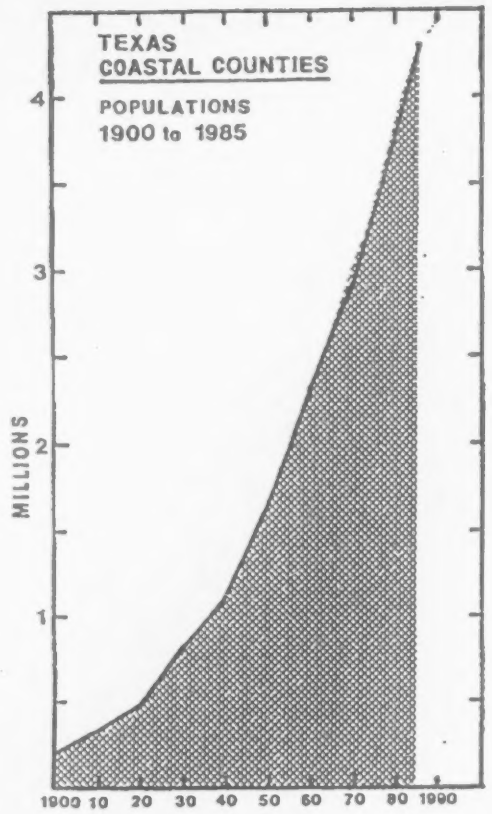
Policies should be established which not only require environmental sensitivity, but also discourage development where lives may be placed in jeopardy. Part of those policies could be to require that individuals choosing to building in at-risk areas bear all economic risks.

State and local governments should be encouraged to take innovative steps to limit development on coastal barriers and other vulnerable coastal areas. At a hearing before the Subcommittee on Oceanography and Great Lakes on July 19, 1989, land use management was cited as one of the more effective long term solutions for reducing loss of life and property from hurricanes by Mr. Frank Mancini of the National Committee on Property Insurance, a technical and research organization representing the property and casualty insurance industry.

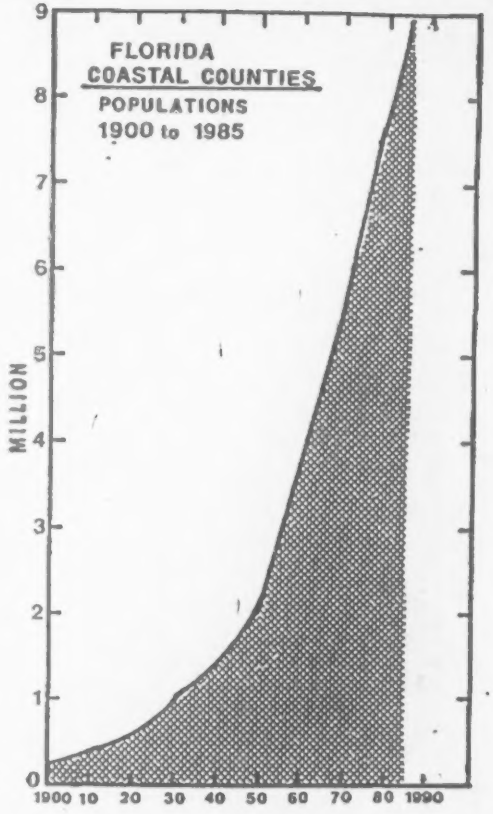
Thirteen states already utilize setbacks to limit waterfront development as part of their comprehensive coastal management programs. However, in his testimony at that hearing, Mr. John Carey, Assistant Administrator for Ocean Services and Coastal Zone Management, NOAA, emphasized the need to strengthen site efforts in this area, and called for new emphasis in the national goals as part of the reauthorization of the Coastal Zone Management Act. The protection of life and property in our

coastal areas requires all levels of government to work cooperatively and comprehensively if we are to avoid the types of disaster described above.

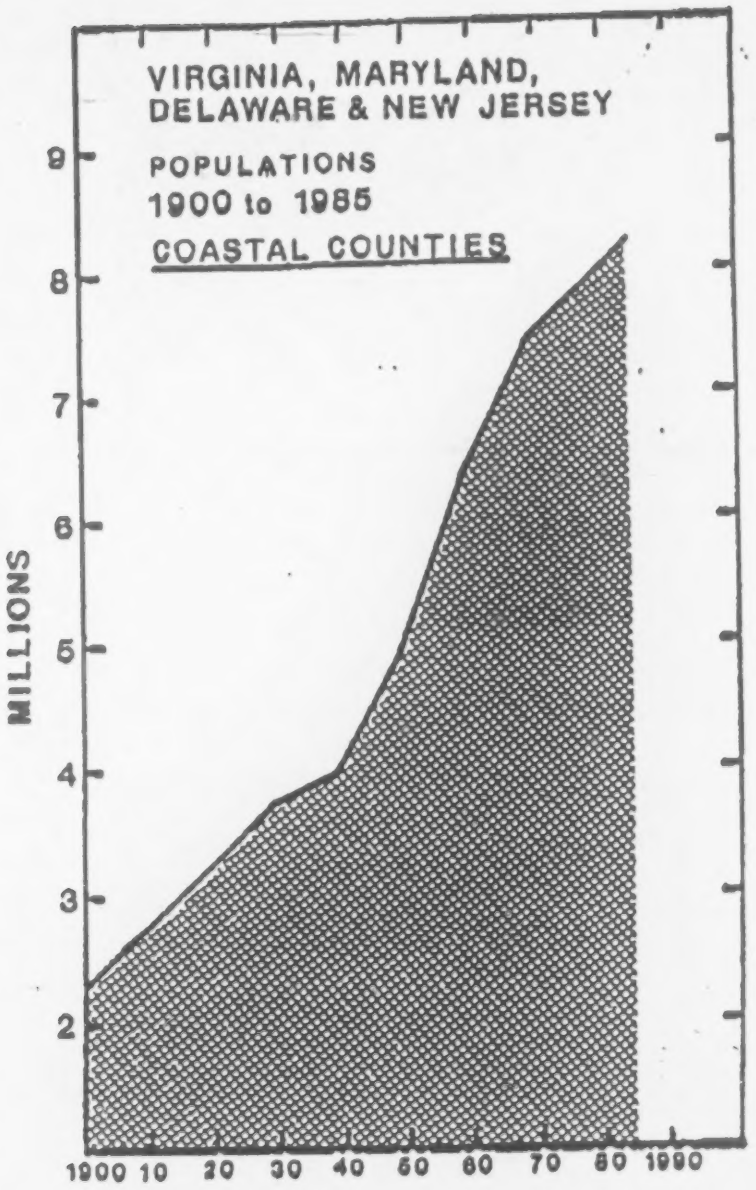
Mr. Chairman, this concludes my prepared statement. I will be glad to answer any questions you may have.



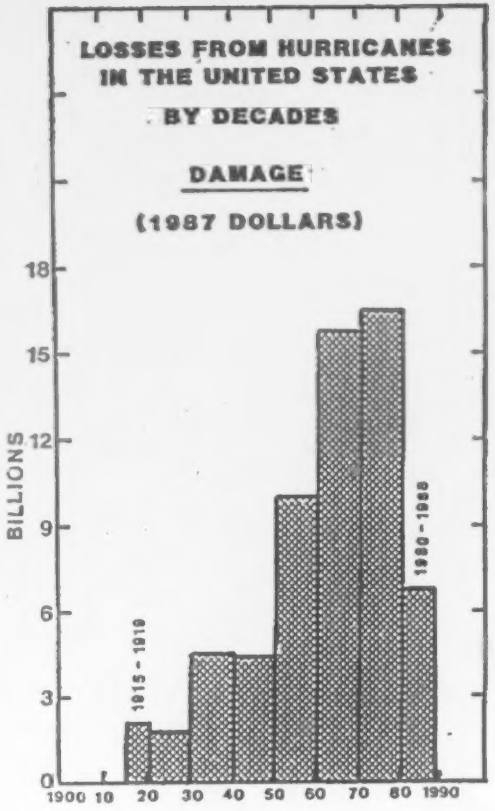
Coastal county populations for the state of Texas from 1900 to 1985.



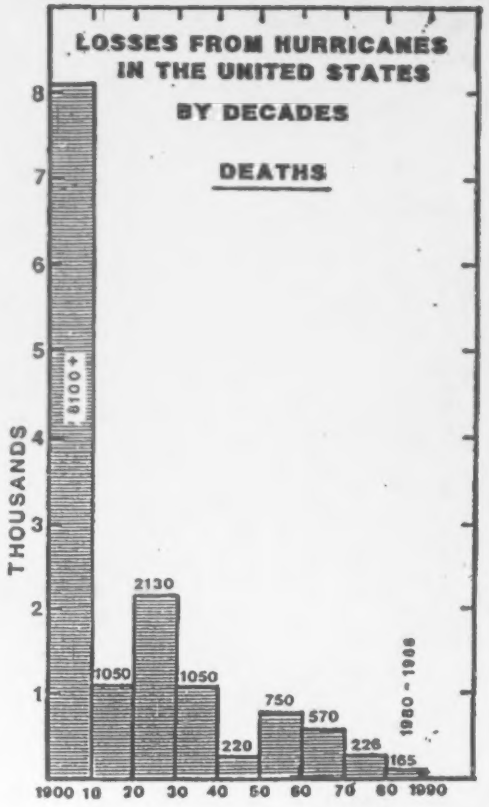
2. Coastal county populations for the state of Florida from 1900 to 1985.



3. Coastal county populations for the states of Virginia, Delaware and New Jersey from 1900 to 1985.



4. Direct damage by decade resulting from hurricanes striking the continental United States from 1915 through 1988. Losses have been adjusted to 1987 dollar values.



5. Deaths by decade resulting from hurricanes striking the continental United States from 1900 through 1988.

Testimony of
Martin R. Jannereth
for the
Michigan Department of Natural Resources
on
the Coastal Barrier Improvement Act of 1989
before the
Subcommittee on Fisheries and Wildlife Conservation
and the Environment
and the
Subcommittee on Oceanography and Great Lakes
of the
Committee on Merchant Marine and Fisheries
U. S. House of Representatives
August 2, 1989

Mr. Chairmen and members of the Subcommittees, I am Martin Jannereth, Supervisor of the Great Lakes Shorelands Management Unit for the Michigan Department of Natural Resources. I appreciate the opportunity to testify today on the Coastal Barrier Improvement Act of 1989.

Of the 112 Coastal Barriers proposed by the Department of the Interior in the Great Lakes, 75 or 67 percent are in Michigan. Consequently, Michigan has the largest stake of any Great Lakes state in the proposal to incorporate these Great Lakes areas into the Coastal Barrier Resource System.

Michigan has over 3,200 miles of Great Lakes shoreline. Approximately 350 miles of Michigan's coast is classified as an erosion hazard area and another 300 miles of the shoreline is classified as having significant fish and wildlife habitat, ie., primarily coastal wetlands and rookery areas. These areas are

identified as high risk erosion areas and environmental areas on Exhibit 1. These hazard prone and sensitive areas are currently regulated under State law. We consider the proposed inclusion of 75 sites into the national Coastal Barrier Resources System to be supportive of our state efforts to protect these areas and regulate new development.

We believe the 1982 Coastal Barriers Resources Act was an historic and innovative step toward placing the financial burden of storm losses and natural resources depletion away from the federal government and on the shoulders of property owners who buy or build in hazardous areas. Expansion of this program to the Great Lakes and possibly the Pacific Coast makes sense in terms of broadening the scope of the Act into a truly national program. I hope the Coastal Barrier Resources Act and its amendments will become a model for removing federal expenditures which promote development in any area which possesses a large risk of loss of life, waste of federal revenues and damage to fish, wildlife and other natural resources. Such an approach could be applied to floodways and V-zones under the National Flood Insurance Program, highly productive wetlands, areas of high risk from mudslide, shoreline erosion, and other areas hazardous to development. Further, we believe that current regulations which prohibit federal funding of sewer lines in designated coastal barriers should not be relaxed.

Michigan has been afforded ample opportunity to review the proposed

coastal barrier sites. Starting in 1984, I have worked with the Department of the Interior to review and comment on the proposed coastal barriers in Michigan. Dr. Norb Psuty of Rutgers University and Mr. Frank McGilvrey of the U. S. Fish and Wildlife Service were receptive to proposed changes which Michigan recommended, including the addition of six units to the proposed list. More recently Dr. Al Greene, Great Lakes Coastal Barriers Coordinator with the National Park Service is to be commended for his cooperative efforts. The working relationship he has established with Michigan has been deeply appreciated. As a result, we have no concerns with the boundaries of the 75 proposed sites in Michigan.

I would like to reaffirm our support for the position that otherwise protected areas such as publicly owned areas and areas protected by Federal, state, or local government law be exempted from the system. We believe that inclusion of these areas would serve no useful purpose.

Michigan has, however, a major concern with the impact of the Coastal Barrier Improvement Act of 1989 on our shoreline transportation network. The Great Lakes Coastal Barrier Act of 1988, P.L. 100-707 contained an amendment which exempted highways located within the State of Michigan if Congress adds units along the Great Lakes to the Coastal Barrier System. Because the Great Lakes proposed Coastal Barriers were not a part of the Coastal Barrier System upon passage of the P. L. 100-707, the exception of

Michigan highways was never codified. We believe Michigan highways should be exempted from the Coastal Barrier Resources Act for the following reasons:

1. Access. The present highway system in Michigan already passes through several of the proposed coastal barriers. Consequently, access to these areas is already sufficient to support development by non-federal interests. I would emphasize that the coastal barriers in Michigan are not barrier islands where a bridge or causeway is required. They are part of the mainland. Since widening the highway for safety reasons would not increase access, we believe the intent of the Coastal Barrier Resource Act and its amendments would be met by exempting Michigan highways.

2. Critical habitat. Denial of funds to expand Michigan highways passing through coastal barriers would force the selection of alternate routings which would be eligible for federal funding. Road relocation would threaten interior wetlands and not reduce access to the coastal barrier by the present road system. U. S. Route 2 in the Upper Peninsula of Michigan is an example where a potentially serious mistake could be made by relocating a road from a coastal barrier into high quality wetlands inland of the coastal barrier. For these reasons we ask the subcommittees to retain the exemption for the expansion of Michigan highways within the proposed coastal barrier system. If this exemption is retained from the 1988 legislation, we would support the inclusion of the 75 Michigan units into the Coastal Barrier Resource System.

Mr. Chairman, this concludes my brief statement concerning our position on the Coastal Barrier Improvement Act of 1989 and the Coastal Barrier Resource System. I thank you for the opportunity to testify. I also commend you and the leadership of this committee in pursuing a reduction of inappropriate federal expenditures on undeveloped coastal barriers. I would be pleased to respond to any questions that you or members of the subcommittees may have.

HAZARD PRONE AND WETLAND AREAS
ALONG
MICHIGAN'S GREAT LAKES COAST

ENVIRONMENTAL AREAS

HIGH RISK EROSION AREAS

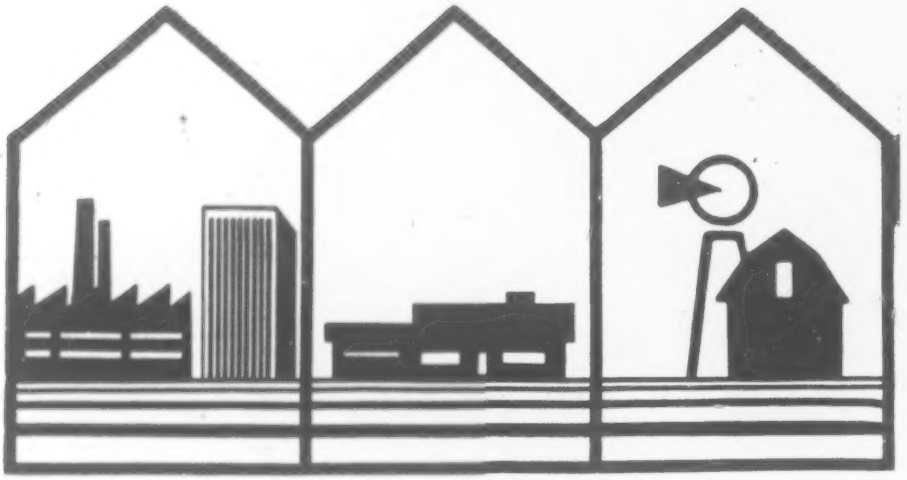
DNR

GIS

GREAT LAKES INFORMATION SYSTEM
DEPARTMENT OF NATURAL RESOURCES
LAND AND WATER MANAGEMENT DIVISION

DATE: 7-13-89

EXHIBIT 1



Statement of the

NATIONAL ASSOCIATION OF REALTORS®

The Voice for Real Estate™

REALTOR® **THE WORLD'S LARGEST TRADE ASSOCIATION**

TO: HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES
SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION
AND THE ENVIRONMENT
SUBCOMMITTEE ON OCEANOGRAPHY AND GREAT LAKES

SUBJECT: H.R. 2840, THE COASTAL BARRIER IMPROVEMENT ACT OF 1989

DATE: AUGUST 2, 1989

HEARING BEFORE THE U.S. HOUSE OF REPRESENTATIVES

SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION

AND THE ENVIRONMENT

SUBCOMMITTEE ON OCEANOGRAPHY AND GREAT LAKES

COMMITTEE IN MERCHANT MARINE AND FISHERIES

ON H.R. 2840

AUGUST 2, 1989

Thank you, Mr. Chairman, for the opportunity to submit our statement for the record before the Subcommittees on Fisheries and Wildlife Conservation and the Environment, and Oceanography and Great Lakes on the legislation H.R. 2840, the Coastal Barrier Improvement Act of 1989. The NATIONAL ASSOCIATION OF REALTORS®, comprised of more than 800,000 members involved in all aspects of the real estate industry, has a keen interest in proposed changes to the Coastal Barrier Resources System (CBRS) and the Coastal Barrier Resources Act (CBRA) because of the dramatic effect such changes may have on the utility, marketability, and value of private property.

Our concerns extend beyond the immediate interests of the real estate industry and encompass the larger issue of protecting private property rights. The NATIONAL ASSOCIATION OF REALTORS® strongly believes in the fundamental right of all private property owners, working through local government, to determine the highest and best use of their land. Every person should have the right to acquire real property with the confidence and certainty that the value of their property will not be unduly diminished or jeopardized by governmental action at any level without the owner's expressed consent. The Federal government should minimize its involvement in land use decisions that selectively implement or

withhold Federal programs, as outlined in H.R. 2840. Planning for the classification and use of land must adequately consider the needs of housing and commercial growth as well as the quality of life and a healthy local economy. Therefore, the NATIONAL ASSOCIATION OF REALTORS® opposes wide scale expansion of the Coastal Barrier Resources System and thus opposes H.R. 2840.

As stated in the Department of the Interior's Final Report to Congress (1988) as required by Section 10 of the CBRA, the Atlantic Ocean and Gulf of Mexico coasts contain approximately 2,700 miles of shoreline on over 400 coastal barriers. As it exists today, the Coastal Barrier Resources System is comprised of approximately 450,000 acres of land along these shorelines. The recommendations contained in the Department of the Interior's Final Report to Congress, and as incorporated into H.R. 2840, would add approximately 790,000 acres of this shoreline to the CBRS.

ATLANTIC AND GULF COASTS

In its Final Report to Congress, the Department of the Interior appropriately limited the amount of acreage being recommended for inclusion in the Coastal Barrier Resources System to the Atlantic and Gulf coasts. In Section 2 of the Coastal Barrier Resources Act, Congress identified problems unique to coastal systems in the eastern and southeastern portions of the country. Congress determined, in passage of the CBRA, that loss of human life, wasteful expenditures of Federal revenues, and damage to fish and wildlife in certain coastal barrier areas necessitated prohibition of Federal expenditures in order to inhibit further development. We agree with the Department of the Interior's

assessment in their Final Report to Congress that coastal barrier designations beyond the Atlantic and Gulf coasts are not consistent with the intent of Public Law 97-348. However, in its final recommendations for changes to the current CBRS, the Department of the Interior failed to thoroughly review all impacts, both environmental and economic, which inclusion in the System will have on governmental as well as private interests. Therefore, we strongly urge Congress to undertake this review before expanding the current CBRS by adopting the recommendations in H.R. 2840.

GREAT LAKES COAST

The NATIONAL ASSOCIATION OF REALTORS® is concerned that the time frame established for the remapping and restudying of the Great Lakes states was extremely limited. The Department of the Interior took several years to produce more accurate maps, to study the appropriate areas, to allow for adequate public input, and to make recommendations for changes to the existing Coastal Barrier Resources System. The Great Lakes recommendations that were recently transmitted to Congress did not allow sufficient time for the Department of the Interior to comprehensively review all the information including accurate economic and environmental analyses of those areas proposed for inclusion in the CBRS, nor was there an appropriate period for public comment. It is inappropriate, at best, to have allowed both the Secretary of the Interior and the public such short notice to act on the serious business of preventing certain private property owners from utilizing government programs available to everyone else.

It is evident that the final maps transmitted to Congress in June did not incorporate many, if any at all, of the public comments the Department of the Interior had received for the Great Lakes proposal. Our members provided comments to the Department of the Interior in a good faith effort to express concern with the Great Lakes maps. The comments provided on the maps were done without the benefit of environmental and economic assessments of those proposals, and without the benefit of locally held hearings by the Department in an attempt to work out some of these concerns.

WEST COAST

The NATIONAL ASSOCIATION OF REALTORS® has great concern with language requiring the Department of the Interior to "restudy" and "remap" the Pacific coast states for their possible inclusion in the Coastal Barrier Resources System. It must be remembered that the CBRS was developed and enacted to address problems unique to the eastern and southern coastal systems. Congress originally recognized that other coastal systems, such as those located on the Pacific shoreline, do not experience the same oceanographic and climatological forces as those systems on the Atlantic and Gulf coasts. These areas also do not experience the same development pressures and thus do not present the degree of hazard to human life, fish and wildlife that Congress believed existed on other coastal barrier systems. Thus, Congress appropriately limited coverage of the CBRS to the Atlantic and Gulf coasts.

ASSOCIATED AQUATIC HABITAT

The designation of associated aquatic habitat, as outlined by the Department of the Interior's recommendations and as included in the legislation H.R. 2840, should have been done on a more scientifically precise basis and in a manner that better reflects the multiple purposes of the Coastal Barrier Resources Act. While it may be appropriate to include adjacent upland portions of a coastal barrier in the Coastal Barrier Resources System, these delineations seem to have been done without a precise methodology. Further documentation about those areas that are typically subject to wind, wave, and tidal energy from storms hitting the coastal barrier are needed. The report also lacks details regarding how the other goals of the CBRA, such as protecting human life and minimizing expenditure of Federal funds, are being met by recommending for inclusion such large portions of associated aquatic habitat.

NATIONAL FLOOD INSURANCE PROGRAM

A uniform policy for administering the National Flood Insurance Program should be adopted, eliminating the existing double standard which denies insurance coverage for certain flood prone areas, such as coastal barriers, and wetlands, yet retains coverage for the remainder of the United States subject to flooding. Legislative actions that alter the Federal flood insurance program must ensure legitimate property rights and reasonable development opportunities are not abridged.

6

In the Department of the Interior's Final Report to Congress, the statistics used for flood damage and flood insurance relate to coastal communities and not specifically to coastal barriers. These figures are misleading in that only a very small portion of these coastal communities, on the average, are coastal barriers. Indeed, if the Department of the Interior has such information for coastal barriers, its publication would be most useful. Congress must recognize that this type of data as identified in the Department's report, is not a current description of the situation on coastal barriers, but of coastal communities.

It is important to note that applicants for Federal flood insurance under the National Flood Insurance Program (NFIP) for all new construction pay the full actuarial rates that reflect the risks, so the government is minimally at risk with all new properties coming under the NFIP. Under the NFIP, participating areas and individuals must utilize flood plain areas in a prudent manner and can incorporate flood proofing techniques into site planning and building renovation. The NFIP imposes stringent building construction safety standards on all new construction and substantial improvements in flood hazard areas where their insurance is available. This has resulted in much safer construction in the Nation's flood plain areas that would have taken place absent the requirements of that program. This safer construction has had the positive effect of reducing the potential for loss in such areas.

If Federal flood insurance is not available in those areas proposed for inclusion in the Coastal Barrier Resources System, it is likely that any development that does occur without the benefit of Federal funds will also not

have the benefit of safety margins as are assured by participation in the NFIP. Adherence to the NFIP regulations provides a substantial measure of protection for property and life (a key component of the Coastal Barrier Resources Act). We remain concerned that denial of Federal flood insurance may result in the development of substandard and unsafe housing along the Nation's coasts truly increasing expenditures at all levels of government as well as jeopardizing human health and welfare.

Critics of the use of Federal flood insurance along the coasts have both overestimated the costs of the NFIP, and underestimated the real economic and other costs of arbitrarily closing off large areas to development. In the National Wildlife Federation and National Tax Payers Union April 17, 1989 report entitled, "Turning the Tide on Wasted Tax Dollars," (Miller and Stroup) it appears that several of the assumptions made are incorrect according to data provided by the Federal Emergency Management Agency with respect to the National Flood Insurance Program. The current NFIP "penetration of the market" is approximately fourteen percent, not ninety percent as assumed for the purposes of identifying deficits that exist (page 15). The $55 average deficit (page 14) does not seem to have been derived from current NFIP data which indicate an operating surplus for "V Zones" in Pre and Post FIRM construction, rather it appears to be the composite of all NFIP policies including inland areas. Taking the data issued by the NFIP in the document entitled, "National Flood Insurance Program Loss and Expense Experience Accident Period 1978-1988," (appendix A) it is quite evident that the figures identified in the NWF report for both high and low development cases are incorrect. As an example, the NWF assumes that each of the 19,400 acres in the low development case will have development at the rate

of 5 structures (or 5 potential policies) per unit, for an approximate total of 100,000 potential policies. Using current NWF assumption of 19,400 additional acres in the low development case, the actual approximate market penetration rate of fourteen percent, and the NFIP data for V Zone Post FIRM and V Zone Pre FIRM policies, it is easy to see that a surplus of approximately $2,445,100 would exist per year for Post FIRM V Zone policies with the surplus carried out over 20 years of approximately $48,902,000, and an approximate surplus of $ 614,600 per year for Pre FIRM V Zone policies with the surplus carried out over 20 years of approximately $6,146,000. We are not experts in being able to interpret such data, and would find it extremely useful if the Federal Emergency Management Agency would review this study as it relates to the NFIP.

In another paper, delivered at the Coastal Zone '89 Conference in Charleston, South Carolina on July 13, 1989, it appears that the NWF comes up with some very different conclusions than the April 17, 1989 report. The paper, entitled "Building in the Coastal Barrier Resources System" (Jones and Stolzenburg), attempts to assess the development that has occurred on CBRS units since 1982. Through an examination of aerial photographs for 157 units from 1986 to 1988, the NWF found that there was a 40.7% increase in the number of structures on these units, 52.5% of which occurred in Florida. The report also concluded that "more extensive research is needed to fully assess the impact of CBRA on coastal development." Although one of the purposes of the Act was to discourage development by denying the availability of Federal flood insurance and Federal financial assistance, the study found that the prohibition of Federal flood insurance did not preclude development.

CONCLUSION

In summation, changes to the Coastal Barrier Resources System are controversial and will have a significant impact on private property owners. In order to thoroughly review the successes and problems of the Coastal Barrier Resources System, Congress must provide the public with ample opportunity to express concern or agreement with those areas proposed for inclusion or deletion to the System including comprehensive field hearings in all those areas impacted. We urge Congress to consider all comments offered by affected private property owners, and realize the true impact of inclusion in the Coastal Barrier Resources System to those individuals.

We ask Congress, is it fair that property owners located in high risk inland flood plains are able to receive Federal funds for development while those property owners who reside along the coasts of the United States are denied this opportunity? And in this time of ever increasing housing costs, is it fair to cut off opportunities for home ownership to those individuals who wish to reside along the coasts of this country? Congress must fully examine the actual economic impacts inclusion in the Coastal Barrier Resources System has on our local communities, State and Federal governments and weigh these impacts against marginal environmental benefits and the ability denial of Federal funds has to protect human lives. We recognize that inclusion in the System does not prevent development, however, we maintain that the effects of denial of Federal funds may indeed place a greater likelihood for the adverse impact on the Federal budget and the greater potential for hazard to human life, fish and wildlife. And finally, we agree with Elise Jones and William Stolzenburg of the National

Wildlife Federation that there indeed is a need for further research of the impacts of the Coastal Barrier Resources Act before Congress can consider changes to the Coastal Barrier Resources System.

We look forward to working closely with you on this issue of vital importance.

Ira Gribin

President

APPENDIX A

JUNE 1989

NATIONAL FLOOD INSURANCE PROGRAM
LOSS AND EXPENSE EXPERIENCE
ACCIDENT PERIOD 1978 - 1988

	Zones VR,V1-V30 Post FIRM	Zones VR,V1-V30 Pre FIRM	Unnumbered Zone A Post FIRM	Unnumbered Zone A Pre FIRM	Zones AR,A1-A30 Post FIRM	Zones AR,A1-A30 Pre FIRM	Zones B,C,X	Emergency Program	Program Totals
1) Earned Exposures (earned policy terms)	105,649	529,642	313,407	1,484,525	1,304,300	5,955,749	5,957,993	3,145,321	28,449,041
2) Average Earned Premium	$378.96	$242.71	$210.47	$190.95	$143.40	$173.57	$128.84	$109.72	$153.55
3) Number of Paid Losses	1,416	9,584	1,942	22,352	5,718	110,415	67,474	102,640	348,687
4) Average Loss Payment	$8,504.73	$8,376.78	$8,145.42	$8,172.16	$9,859.65	$7,861.92	$7,647.12	$5,552.85	$7,225.41
5) Loss Ratio	0.30	0.63	0.16	0.65	0.30	0.84	0.67	1.65	0.80
6) Loss Frequency per 100 Policies	1.3	1.8	0.6	1.5	0.4	1.9	1.1	3.2	1.2
7) Average Loss Cost per Policy	$114.84	$152.81	$97.68	$122.14	$43.27	$145.74	$88.-	$1[illegible]	$[illegible].20
8) Other Expenses (average per policy)									
a) Agent Comm./Allowance	$58.16	$37.45	$3[illegible].47	$29.48	$22.13	$26.80	$19.88	$16.91	$23.69
b) Loss Adjuster	$5.99	$6.94	$1.54	$5.86	$1.69	$6.44	$4.02	$18.32	$5.88
c) Servicing Facility/ WYO Operating Allowance	$23.51	$23.51	$23.51	$23.51	$23.51	$23.51	$23.51	$23.51	$23.51
9) Operating Surplus/ (Deficit) per Policy on Paid Basis*	$174.65	$21.96	$123.22	$7.66	$52.84	($28.83)	($5.17)	($122.67)	($27.73)

*The operating surplus is the policyholder contribution in periods of relatively better loss experience towards reserves used to fund high loss years.

APPENDIX B

EVALUATING THE COASTAL BARRIER SYSTEM EXPANSION PROPOSAL

SUMMARY OF THE ANALYSIS

- The Miller study ignores one-half of the calculation since it does not count the possible economic loss of the development of the fastland to be added to the CBRS.
- We can roughly estimate these impacts (1987 dollars) on the order of $18.6 billion to $31 billion which exceeds the $10 billion savings computed by Miller. Since home prices have been increasing at an average of 5 percent per year over the last two years, the 1989 dollar value ranges from $20 to $34 billion. Of course, Miller's estimates would probably increase as well.
- These impact figures do not even include the potential tax base increase and resulting federal, state, and local taxes that would be collected due to development.
- However, the impact estimates assume that withdrawal of the subsidies (expanding the CBRS) would result in no development of the area and that developers cannot develop anywhere else, in lieu of the CBRS areas. This assumption can be challenged but nevertheless still rings true in many places where desirable coastal areas are scarce and very costly to develop without Federal programs.
- Nevertheless, our basic economic argument strongly indicates the economic losses from not developing probably exceed the Federal subsidy costs, indicating expanding the CBRS is not a good idea.

OVERVIEW

A major shortcoming of the study "Turning the Tide on Wasted Tax Dollars" by H. Crane Miller is that it does not count the possible economic loss of non-development of the fastland proposed for inclusion in the CBRS. It is possible to roughly estimate the maximum loss from nondevelopment using several assumptions and the proposed parameters of the study.

If coastal barriers are added on all coasts, this would contribute 81,063 acres of fastland (dryland) and 439,258 acres of wetland. In the high development case, which provides the largest benefit from decreased subsidy, the savings totals $10.8 billion. We will focus on that case since it generates the largest benefit.

Using the high development case assumption of development or urbanization of 50 percent of fastlands, the full system would include 40,530 acres of dry land that could be developed/urbanized. We will not attempt to construct an estimate for wetlands development since specific housing unit assumptions are not given. Using their assumption of an average density of 5 dwelling units per dryland acre suggests some 200,000 new units potentially could be developed. In previous studies, (see Appendix) we have estimated the average contribution to the economy of a new home at about $155,000 in 1987 dollars, including multiplier effects which are spread-out over time. Thus, a rough estimate of the potential economic loss if no private development occurs in the absence of the federal programs for insurance, severs, roads, and bridges is $31 billion. This clearly exceeds the $10 billion in benefits to the Federal Treasury from not developing the areas.

Some Caveats Regarding the Estimates

We are implicitly assuming that the withdrawal of the Federal subsidies would cause no private development to occur. However, if only one-half of the urbanization occurs, there is still a $15 billion

benefit to development. Another assumption involves the possible substitution of non-CBRS lands for development which would not have occurred if the CBRS additions were not made. This analysis implies that developer supplies of land are totally fixed including to the CBRS lands. That is, they cannot develop anywhere else. This is a major problem with any spatial development analysis, that is, to assume that land parcels across space are not fungible. A sightly better assumption is that developers have detailed plans for all parcels, including the proposed CBRS additions which cannot be altered without significant cost to all development. Thus, the loss of the CBRS lands cannot be replaced by land somewhere else. This is probably true for certain kinds of recreational and resort properties. It also costs to re-allocate local land resources and to go through the development planning process. Thus, there will be some process costs to developers who had planned to develop these areas and find they cannot. Furthermore, the price of developable land in the immediate vicinity should rise, raising future land development costs, and ultimately the prices paid by consumers.

A small weakness in the $155,000 new housing construction cost estimate is that it includes multiplier effects of $44,000. These occur over time (perhaps up to two years) and are estimated based on the entire economy. However, the average construction cost estimate of $77,000 is an "injection" into a local economy that occurs within a year (97 percent of new starts are completed and sold within a year), thus, it has a definite impact in a relatively short period of time.

In terms of current costs, the median price of a new home increased from $96,500 in April 1987 to $117,000 in April 1989 or a 21 percent increase. Assuming costs rose proportionately, the $155,000 is more on the order of $187,500 in current dollars. Thus, even if we cut-off our multiplier effects, we still have a construction cost of about $93,000 leading to an effect of $18.6 billion, ignoring other impacts from successive rounds of spending by recipients of the factor payments.

Under the high development scenario the construction of a residence would have to generate average values (in present value terms) of $54,000 to just equal the savings to the Treasury from non-development efforts. It seems quite likely that most development including commercial and high density residential should be able to average $54,000 across all 200,000 parcels. To this extent, it is very likely that the contribution to the economy, especially local economies, from developing these land would exceed the Treasury savings.

A more stringent test of whether development is more beneficial than non-development is if the taxes generated over time from development would offset the future value of the subsidies. In other words, could the additional benefit generate sufficient federal taxes to pay for the subsidies? This is too difficult to answer without a model, although, given enough time the development should. Furthermore, in analyzing the case, we have ignored any development of wetlands. To the extent, these areas could be developed (approximately 220,000 acres) for residential or business purposes, there should be substantial benefits.

DISCUSSION OF THE PROPOSAL SPECIFICS

The Coastal Barrier Resources Act of 1982 prohibited all new federal expenditures and financial assistance within the Coastal Barrier Resources System (CBRS), with certain exceptions. Any new developments within the barrier would not have benefit of federal subsidies for roads, bridges, causeways, wastewater management, water supply, treatment and distribution, disaster relief, flood insurance, shore protection, and similar measures. The CBRS includes the Atlantic and the Gulf of Mexico coasts. A proposal is before Congress to expand the existing CBRS on the Atlantic and Gulf of Mexico Coasts, and include the Great Lakes and the Pacific Coasts in Washington, Oregon and California.

Summary of the Study

The author of the report being reviewed here argues that the 1982 act takes a *laissez faire* stance in that it does not restrict development but rather removes government subsidies for these areas. However, all land outside the CBRS are eligible for government subsidies. Thus, the federal government must feel that the differential treatment of the CBRS is warranted due perhaps to the increased incidence in this area of natural hazards and environmental destruction. Whether this extension of this differential is warranted has not been determined. This study only estimates part of the components necessary to evaluate the proposal.

The report produced for the National Wildlife Federation by H. Crane Miller estimates the cost savings that could be realized by the federal government if the coastal barrier resources system were expanded to include eligible areas identified by the U.S. Department of Interior. The report estimates a cost savings to the federal government of between $1 billion and $9.3 billion if the system were extended to include the additional acreage recommended by the U.S. Department of the interior on the Atlantic and Gulf of Mexico coasts. Further expansion to include coastal barriers of the Great Lakes and the Pacific Coastal barriers is estimated to increase savings to between $1.9 billion and $10.8 billion.

METHODOLOGY OF THE STUDY

The amount of acreage to be added to the coastal barrier system is based on the Department of Interior's recommendation.

The estimates are based on a number of assumptions and are derived for two scenarios. The low development case assumes 50 percent development of the fastland acreage in each unit. The high development case assumes 50 percent development of the total fastland and estimated additional wetlands.

The assumptions include:

- Average density on the developed acreage would be 5 dwelling units per acre;
- Average occupancy would be 4.3 persons per dwelling unit;
- 80 gallons per capita per day water use;
- 80 gallons per capita per day sewage flow;
- only island units with greater than 100 acres of fastlands and with no current bridge or causeway access are considered potential candidates for bridges or causeways.

Estimated costs are based on cost information provided by government agencies.

Comments on Evaluating the Proposal

A full evaluation of a government proposal should:

(1) Estimate the present value of the total private and social costs.

(2) Estimate the present value of the total private and social benefits of the proposal.

(3) Determine whether the net present value of the benefits minus the costs are positive or negative.

(4) If the net present value is negative, then the proposal should not be considered.[1]

(5) If the net present value is positive, then proposal should be considered.

The study by Miller cannot be used to fully evaluate the merits of the proposal because it estimates only a part of the benefits of the proposal (i.e., the cost savings to federal government), and does not estimate the cost of the proposal at all (i.e, lost economic activity, etc.)

Total Benefits of the Proposal

The author indicates that the study only estimates part of the direct cost savings to the government. For example, estimates for sewers, wastewater treatment facilities, etc. represent only construction costs and do not include planning, engineering, rehabilitation, repair and other costs in which the federal government might share. Moreover, the cost savings do not include consideration of the number of lives which might be saved and benefits to the environment. To the extent that the study's estimate is correct, it understates the total benefits of expanding the CBRS.

Total Costs of the Proposal

The study does not address the present value of the costs of the proposal. These costs are associated with losses in income and tax revenue due to the foregone development in the proposed additions to the CBRS. The enactment of the proposal would eliminate any additional employment which would have occurred due to the construction involved in development of the area, additional employment due to ongoing commercial activity generated by the development, and any multiplier effects associated with the development which would have occurred.

A report by the NATIONAL ASSOCIATION of REALTORS®, Real Estate in the U.S. Economy, estimated the output multiplier for the real estate industry to be 3.74. This means that a change in the final demand for real estate by each $1 would generate $3.74 worth of additional final output. This is because an increase in the demand for real estate would generate increases in the output of many intermediate goods and services that are required to produce the additional quantity demanded. Moreover, increases in employment would lead to additional income spent on other goods and services localities, and any net increase in tax revenue due to increased economic activity. The proposal would limit demand for real estate which would occur if the barrier is not extended, but we cannot say that the full multiplier effect due to the proposal is 3.74. This is because the money that would have been spent on purchasing properties in the proposed area would be diverted elsewhere, producing these other multiplier effects.

The revenue loss to the government due to limited development resulting from the proposal should also be considered. The development would expand the property tax base, and lead to additional federal, state and local income and sales tax collections.

Other costs to be considered involve the windfall losses to ongoing or future projects. If land was purchased and is in the process of being developed, or is to be developed in the future, then enactment of the proposal would lead to windfall losses to the current owners of the land. Thus, unless specific provisions are included in the proposal to protect these types of land/property owners, they would be unfairly harmed if the proposal were to become law.

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[1]However, the proposal to take away government subsidies to additions to the CBRS may still be considered if the money could be better used in other government programs, or if the money would be better off in taxpayers' hands (i.e., tax them less).

Net Present Value

Whether the benefits of the proposal would exceed the costs cannot be evaluated here, but it is suspected that the answer will differ for different areas under the proposal. In some areas, the probability of natural hazards and the potential environmental destruction might be so great as to encourage non-development of the area. However, in other areas, the risks associated with these events, and the subsidy from the government may be minimal in comparison with the benefits of additional economic activity that might arise from development.

Conclusion

The study by Crane Miller for the National Wildlife Federation is not sufficient to evaluate the proposal. A full evaluation would weigh the total benefits of the proposal against the total costs. Miller's study only accomplishes a small part of this exercise. Much more analysis is required to come to a valid conclusion.

APPENDIX

Contribution of Home Sales to GNP

Each housing transaction generates significant expenditures before, at the time of, and after the sale. The NATIONAL ASSOCIATION OF REALTORS® estimates that each existing single-family home sold in 1987 contributed nearly $21,000, and each single-family new home sold contributed nearly $127,000 to GNP. The result: in 1987 single-family home sales activity directly and indirectly generated economic activity totalling $222 billion, approximately 5 percent of GNP.

A detailed look at these estimates shows the widespread impact the decision to purchase a home has on the economy. (See Table 1.) Before a sale, owners typically spend a little more than $1,000 on repairs and maintenance in efforts to show their homes in the best possible light. In some cases, home sellers will directly employ professionals to do this work with subsequent employment and output effects. In other cases sellers will purchase supplies from local businesses and do the work themselves. For new homes, the obvious expenditure before the sale is the cost of constructing the housing unit. This average was $77,409 in 1987. Land costs and builder profits push the average new home price to the consumer well over $125,000.

For the most part, direct expenditures at the time of sale focus on the services applied to the sale. They typically includes fees paid to real estate agents, movers, attorneys, appraisers, termite and, structural inspectors, surveyors, property insurance companies, title insurance companies and even local governments. On average, these expenditures totaled $10,000 for each resale transaction in 1987 and $6,725 for each new home sale.

Finally, in the months following a home sale transaction, recent movers make expenditures to personalize their home. Government statistics indicate that recent movers typically outspend homeowning households that did not move. For 1987, the NATIONAL ASSOCIATION OF REALTORS® estimates this difference to have been $2,108 for resale homes and $2,411 for new homes in the 12 months immediately following a home purchase. These after-sale expenditures range from major capital improvements to the purchase of numerous smaller items. Analysis of consumer expenditure survey data collected by the Bureau of Labor Statistics suggests that recent buyers outspend nonmover homeowners on the following goods and services:

- Nonrecreational household furnishings (furniture; lines; minor and major appliances; etc.)
- Capital improvements (building or modernization of rooms, garages, or wings; construction of patios, driveways, or walkways; heating or air conditioning improvements, etc.)
- Miscellaneous consumption (telephone service; service and maintenance contracts, etc.)
- Recreational household furnishings (stereos, television, radios, etc.)
- Clothing

- Insurance and pensions.

While some of these expenditures are explained by differences in income, home sales (both new and existing) do generate substantial expenditures.

Home sales expenditures also feed subsequent rounds of spending. In 1987, these additional rounds of expenditures were conservatively estimated to total $6,900 per existing home, and about $44,350 for each new home sold, roughly half of the immediate impact.

Table 1
CONTRIBUTION OF SINGLE-FAMILY RESALES AND CONSTRUCTION TO GNP

	1987	
	Resales	New
Average Home Sales price	$105,400	$126,900
Construction	---	77,409
Expenditures before resale	1,054	---
Expenditures at time of sale	10,013	6,725
Expenditures after sale	2,108	2,411
Lenders' income net of cost of funds	632	1,776
Mortgage insurers' income	11	51
Subtotal	13,818	88,703
Multiplier effects	6,909	44,351
Total	$20,727	$133,054
1986 Home Sales Volume (units)	3.2 million	1.119 million
Total GNP Contribution	$72.9 billion	$148.9 billion
Contribution as a % of GNP	1.6%	3.3%

Source: NATIONAL ASSOCIATION OF REALTORS®
Homeownership Key to the American Dream
March 1988

PLAYA DEL RIO

August 17, 1989

The Honorable Gerry E. Studds
Chairman, House Merchant Marine &
Fisheries Committee
1501 Longworth House Office Building
Washington, D.C. 20515

RE: Coastal Barrier Resources Act

Dear Chairman Studds:

In reviewing the Coastal Barrier Resources Act, you must look at the cost to the local taxpayers, as well as the federal taxpayers. There have been a series of cases which have required the reduction in the assessed value of property taxes, and as such, the financing system for the local government and its local infrastructure is being jeopardized. In the area of South Texas, in particular, the map reference T-12 in Cameron County, Texas, we had asked the Cameron County Appraisal District to give us an estimate of what the loss in the tax base would be. We have filed, and have pending before the U.S. Army Corps of Engineers, a permit for construction in the area known as T-12, and the loss of the tax base, by inclusion, into the Coastal Barrier Resources Act, would be as follows:

ANNUAL LOSSES

Point Isabel School District	$ 40,104,047.53
Cameron County	13,199,831.34
Texas Southmost College	5,263,980.00
South Texas Independant School District	1,628,265.00
Emergency Services	3,345,750.00
TOTAL ANNUAL LOSSES	$ 63,496,268.04

These reductions in the tax base would further undermine the ability of the local government to continue to support its infrastructure and governmental expenditures. Nonetheless, I think it is also important to make responses in particular to Dr. Robert C. Sheets, and to the President of The National Wildlife

Playa del Rio, Inc.
955 West Price Road
Brownsville, Texas 78520
512-546-9991

Federation.

In response to the statement of Dr. Robert C. Sheets, Director of the National Hurricane Center National Weather Service, National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, I would first of all like to make note that the Department of Commerce has not yet taken a position on the Bill, and therefore, his comments in no way reflect the opinion of the U.S. Department of Commerce on the merits of the Bill.

By his own admission, he says that the warning system has been adequate, but makes great emphasis on the evacuation routes on areas where population growth has been concentrated. In this age of computer predictability of weather trends, and advanced media information systems to say that the warning system is adequate, is an understatement. When you look at a chart of the hurricanes that there have been and the extended media technology penetration of the population areas, it becomes clear that the number of deaths over the different decades have dramatically decreased as the media system has penetrated each and every household in spite of the fact that the population growth has dramatically increased in these areas.

The other matter of great note is that at least in the Texas area the Southern Building Code has a supplement for coastal areas which has been adopted by most coastal communities and requires an above standard level of construction which coupled with the FEMA guidelines of the 100 year flood plane, make for the construction to be hurricane resistant.

Mr. Sheets states that as long as people build in the areas that with economic risks assumed by others that they will continue to do so. This logic is basically flawed because the major premise is flawed. The Federal Emergency Management Agency and the General Accounting Office have verified that the risks

are not assumed by others, but the very nature of the insurance pool is to have the risks shared by all and paid by all through increased premiums, depending on the risks. It has been factually and objectively determined that new construction along coastal areas is in fact, subsidizing the risk to the old construction. So not only is the risk being not assumed by others, but in fact, the new construction is subsidizing the risks of the old construction.

In response to the President of the National Wildlife Federation, I would like to point out that The Environmental Protection Agency and the U.S. Army Corps of Engineers have been empowered to make regulatory decisions on areas that have been classified as jurisdictional or wetlands and as such, they, on a case by case basis, make decisions as to whether a given construction or activity on a given piece of land is permitable under the existing laws of the United States and the Regulations of its Federal Agencies. It appears as if in advocating for his position, he would request duplicitous action by the government causing administrative costs to increase substantially more than what already exists. There is an existing mechanism for the coastlands and wetlands, and the issue then, is what the primary purpose of the Coastal Barrier Resources Act was.

The primary purpose was to minimize the loss of human life and the wasteful expenditures of federal revenues. The general accounting office and the federal emergency management agency which are charged with the flood insurance programs are the ones best situated to make decisions as to the amounts of revenues coming in versus the risks and losses paid and whether or not, there needs to be a reduction or expansion of the flood insurance program. Both of these agencies have testified regardless of how Mr. H. Crane Miller has manipulated the figures, that in fact new construction along the coasts that are insured under the program

help to subsidize old construction. Further, if federal funds are taken away from highway projects, then you compound the problem of evacuation routes and transportation systems for the populations along the coast, thereby not only defeating the purpose of the act, but helping to increase the problem.

It is a noble cause to protect the environment, but the federal laws have long looked at the environment as being primarily important and related to the human environment. It is the interest of the citizens of these United States with their personal property rights guaranteed under the constitution, and rights of life, liberty, and the pursuit of happiness, especially in their retirement years that is being jeopardized in this case. Many families have invested part of their life earnings into parcels of land along the coasts whose value is being jeopardized, or at least diminished, by the inclusion of and/or addition to the Coastal Barriers Resources System. It is from the focus of the environment of our citizenry that we must make decisions and not the environment in a vacuum.

There are existing procedures and agencies and laws to protect the coastlands and the further expansion and administrative cost of the same should be avoided.

Further, for your information and illusidation, I enclose herein a copy of the study of the impacts of the inclusion of the Coastal Barriers Resources Act that was prepared by Espey, Huston & Associates, and other information which I think is pertinant to the issues you are considering at this time.

I would like this letter, and all attached documents, to be a part of the Official Record in response to testimony of August 2, 1989, before the House Merchant Marine & Fisheries Sub-Committee.

I thank you for your time and attention and I remain,

Sincerely yours,

Porchie F. Grady

Porchie F. Grady

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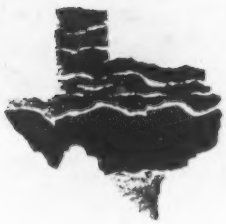

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September 18, 1989

The Honorable Gerry E. Studds, Chairman
House Merchant Marine & Fisheries Committee
1501 Longworth House Office Building
Washington, D.C. 20515-9999

Dear Chairman Studds:

It has come to my attention that some inaccurate testimony concerning the Texas General Land Office and the School Land Board was given at the August 2 hearing on the Coastal Barrier Resources System (CBRS) before the House Merchant Marine and Fisheries Subcommittee. I would like to correct the statements for the record of the committee.

First, as manager of more than four million acres of state-owned submerged land, I would like to reiterate my support for the goals of the CBRS legislation; that is, to reduce taxpayer expenditures in high-hazard areas and to protect fragile coastal barrier resources. Mr. Jay Hair, of the National Wildlife Federation on pages 16 and 17 of his testimony (enclosed), portrayed the General Land Office/School Land board as the villain in attempts to develop land on Brazos Island and generally disparaged the agency's ability and intent to protect sensitive areas. This agency by law must consider applications for use of state-owned land and ultimately determine whether development is appropriate or not. In the case of the Brazos Island lands, the Board never reached a decision because the developer withdrew his application. The Board has now offered to sell or lease these lands to the Texas Parks and Wildlife Department.

The General Land Office and the School Land Board are sincere in their intent to protect the lands originally proposed for inclusion in the CBRS. This is why they enacted the rules (enclosed) which, according to a Texas Attorney General letter (enclosed), have the force and effect of law. That is why they have established the Texas Coastal Preserve System in coordination with the Texas Parks and Wildlife Department. South Bay, adjacent to Brazos Island, was the very first site to be put into the preserve program.

Garry Mauro
Commissioner
General Land Office

Stephen F. Austin Building
1700 North Congress Avenue
Austin, Texas 78701
(512) 463-5256

Thank you for the opportunity to set the record straight regarding this agency and the CBRS. Certainly no state or federal agency--or conservation group, for that matter--is without fault. However, it does us no good to carelessly criticize others who are attempting to protect our valuable coastal resources.

Sincerely,

Garry Mauro

Garry Mauro
Texas Land Commissioner

GM/SSD/jlw

Enclosures